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## ABSTRACT

This publication offers practical guidance to help food service professionals provide sound nutrition to America's children and serves as a basis for the revision of U.S. Department of Agriculture meal patterns, menu planning guides, and the development of new recipes. The guide is organized into two sections. The first, "Implementation of the Dietary Guidelines," suggests that child nutrition programs should strive to offer a variety of foods; to serve meals that help maintain a healthy body and weight; to offer meals low in fat, saturated fat, and cholesterol; to serve plenty of vegetables, fruits, grains, milk products, meat, and meat alternatives; to use sugars and salt only in moderation; and to promote an alcohol- and drug-free lifestyle. Section 2, "Putting It All Together," presents sample school menus and offers simple adaptations for "make-overs" that better reflect the Dietary Guidelines. Appendices provide nutrition quizzes; a dietary fat chart; advice on feeding children in child care; a glossary; "Nutrition and Your Health: Dietary Guidelines for Americans"; and sources for teaching in universities. An appendix provides a copy of a

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Building for the Future:

# Nutrition Guidance for the Child Nutrition Programs



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**Building for the Future:**

# **Nutrition Guidance for the Child Nutrition Programs**

**Guidance for the Promotion of Healthy Eating  
for Children and Teens  
Participating in the U.S. Department of Agriculture's  
Child Nutrition Programs**

The Child Nutrition Programs are open to all eligible children and adults regardless of race, color, national origin, sex, age, or handicap. Any person who believes he or she has been discriminated against in any USDA-related activity should write immediately to the Secretary of Agriculture, Washington, DC 20250.

April 1992

## Preface

*Building for the Future: Nutrition Guidance for the Child Nutrition Programs* has been developed jointly by the U.S. Departments of Agriculture and Health and Human Services, as mandated by Public Law 101-147. This guidance is patterned after *Nutrition and Your Health: Dietary Guidelines for Americans*, third edition, 1990 (see appendix V), which forms the basis for nutrition policy for the Federal Government. Recommendations in the Dietary Guidelines are for healthy Americans, ages 2 years and over. Thus, they are applicable to most participants in the following Child Nutrition Programs:

- The National School Lunch Program
- The School Breakfast Program
- The Child and Adult Care Food Program
- The Summer Food Service Program

*Nutrition Guidance for the Child Nutrition Programs* is part of a long-term commitment by the U.S. Department of Agriculture (USDA) to improve the meals of healthy Americans served by these programs. The publication will serve as a basis for revisions of USDA meal patterns and menu planning guides. It will also serve as a guide for the development of new recipes and commodity food specifications. The nutrition principles presented will form a base for the review of current crediting policies and nutrition-related regulations.

The publication is designed for a large audience—from directors of multiunit school systems to family day-care providers to food service managers in adult and child-care centers. It is not intended to address the nutrition for those in the programs who, because of medical conditions, may have special dietary needs. Also, the publication does not cover operational issues.

The publication provides practical guidance to help food service professionals provide sound nutrition to America's children. It also provides information for others in the education community who are interested in nutrition, including teachers, parents, administrators, school board members, and school health personnel, and children and teens who participate in the programs.

Since this publication covers a wide age range, specific suggestions cannot be used in all programs. However, the general principles discussed do apply to all programs.

The Departments wish to acknowledge the efforts of those who provided comments during the public comment period. The suggestions provided valuable insights that strengthen the publication.

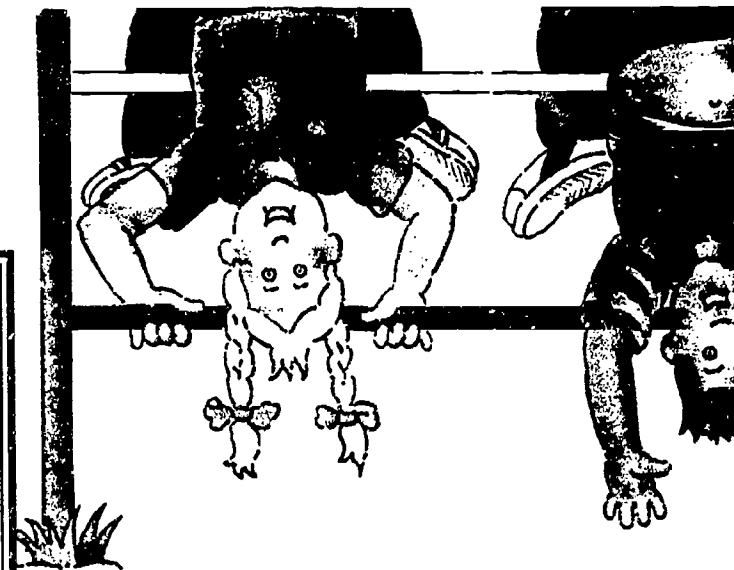
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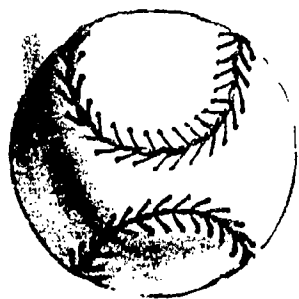
### ***Nutrition Guidance for the Child Nutrition Programs***

*The program should strive to:*

- *Offer a variety of foods*
- *Serve meals that help maintain a healthy body and weight*
- *Offer meals low in fat, saturated fat, and cholesterol*
- *Serve plenty of vegetables, fruits, and grain products*
- *Offer and use sugars only in moderation*
- *Offer and use salt and sodium only in moderation*
- *Promote an alcohol- and drug-free lifestyle*







## Introduction

School and child-care programs help children and teens grow in mind and in body. Mental development requires an alert mind. Physical development requires a healthy body. A healthful diet is necessary for both physical and mental development.

Children eat in places other than at school and at child care, but wherever they eat, the meals they choose are important to their health and performance. Healthful meals, offered by food service personnel, can teach children that wise food choices are important at every meal—at home, in restaurants, or wherever children eat.

This publication is based on the third (1990) edition of *Nutrition and Your Health: Dietary Guidelines for Americans*. It is part of a continuing nationwide effort to improve children's health by offering meals in all Child Nutrition Programs that reflect current dietary guidelines. This publication stresses a diet with a wide variety of foods that are low in fat, saturated fat, and cholesterol.

and that includes vegetables, fruits, grains, milk products, meat, and meat alternates.

This publication encourages wise food choices that result in healthful meals that reflect food preferences. What people eat is determined by many factors. Taste, culture, social situation, religious beliefs, and ethnic background are just some of the influences. Often, dietary recommendations in the popular media highlight foods that should be avoided. Food should be enjoyed. It is the overall diet that counts, not a single meal or food. Above all, healthful food must taste good and be presented in ways that encourage children to choose it.

### **Build Lifetime Eating Habits**

In school and at child care, children acquire attitudes and information that they carry with them throughout life. Nutrition awareness is an essential part of their education. This education takes place during meals with the foods that are offered. Nutrition education also happens throughout the day—at play, in the classroom, and during sports. It is a part of comprehensive school health. The meals children and teens are served and the information and skills they acquire help to set lifelong eating habits.





### ***Techniques That Work***

- *Remember that children are the prime focus*
- *Make gradual changes*
- *Provide tasty and interesting food choices*
- *Integrate the food service program with the total school or child-care curriculum*
- *Promote the program in the school and in the community*
- *Work closely with others to enlist their support*
- *Set small goals and achieve them—success promotes success*

Meals served in school and at child care may be the only nutritionally balanced meals some children eat. That is why it is important to teach good nutrition habits that can extend to eating patterns outside school or child care. This publication is a tool in making good nutrition a natural part of every child's day.

#### Get Started

Following these recommendations does not mean making large or sudden changes. Small, step-by-step changes in recipes and menus are the beginning of creating an excellent program that will be healthful, educational, and cost-effective.

Make mealtime a pleasant and relaxed experience. Adequate time and space are key elements in achieving this. Children, like adults, want to choose their foods. They are more likely to participate in the Child Nutrition Programs if they can choose from a variety of foods. Children can get a good start in learning about a healthful diet from the meals served. For long-term success, the message needs to be repeated throughout childhood in the classroom, in extra-curricular activities, and by parents or caretakers at home.





### Get Everyone Involved

It takes effort to get nutrition information into the school or child-care curriculum. Support is needed from everyone. Food service personnel, principals, teachers, coaches, school nurses, and parents should encourage healthful food choices.

Parents and staff may also benefit from nutrition education activities. Start with the information in this publication including the Dietary Guidelines (see appendix V). Use the "Nutrition—Fact or Fiction?" quiz to spark interest. Consider enlisting assistance from community nutrition professionals in developing a nutrition education campaign.

Creating enthusiasm among children and their teachers will improve the acceptance of meal changes. In schools, promoting new menus with posters, logos, contests, and themes encourages students to participate. In child-care programs, having children assist with preparation of some snacks increases their willingness to try a variety of foods.

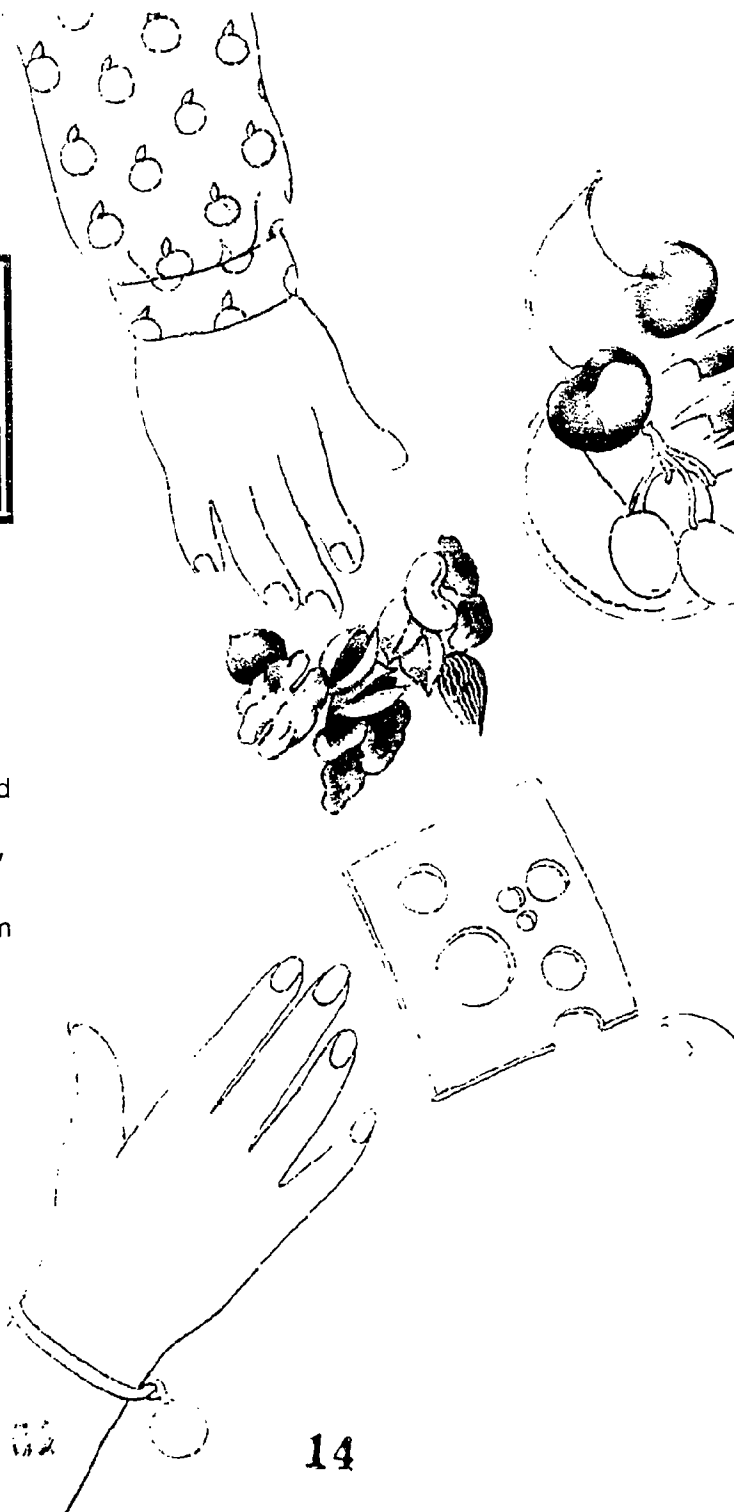
We encourage child-care programs and schools to serve foods following this guidance in **all** areas of the child-care and school environment. This includes meals, snacks, vending, and a-la-carte items.

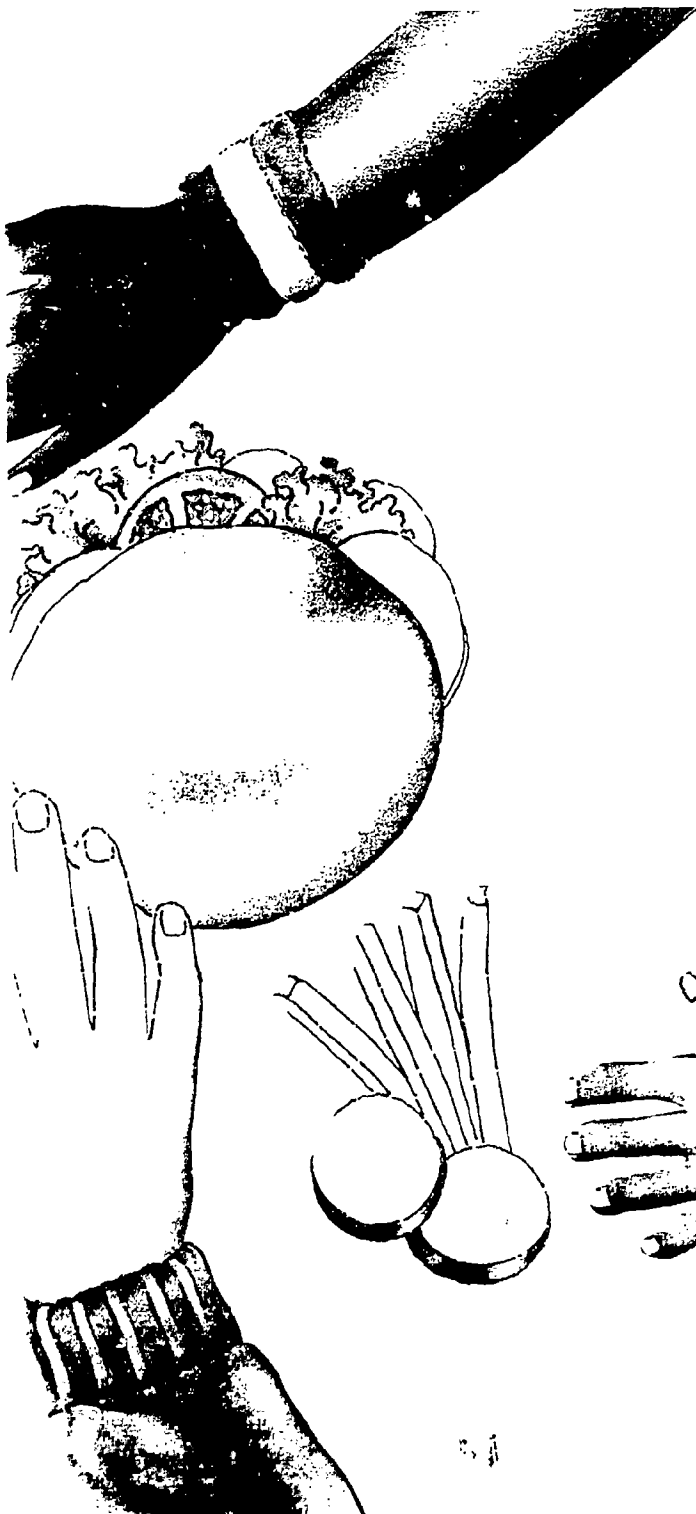
## Implementation of the Dietary Guidelines

### Offer a Variety of Foods

Offering a variety of foods, prepared in different ways, makes meals and snacks more interesting for children and teens. It also makes good nutrition sense.

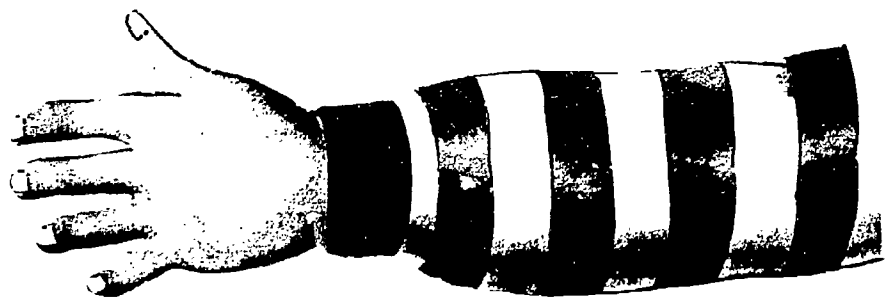
Everyone needs many different nutrients for good health. Nutrients are in food. **No one food supplies all the nutrients in the amounts the body requires.** The nutrients needed are vitamins, minerals, water, carbohydrates, amino acids from protein, and certain fatty acids from fat. Definitions of these and other terms are found in the glossary that begins on page 42.





The meal components in the Child Nutrition Programs' meal patterns include foods to provide a healthful diet. For example, milk is a good source of calcium, while some bread, meat, and their alternates are important sources of iron. Fruits and vegetables are sources of vitamins, minerals, and fiber. Together, the meal components provide calories and needed nutrients.

Some foods, within each component, are better sources of some nutrients. Vary the foods served from day to day, so children and teens get the nutrients they need for growth and health. See pages 8 through 10 for examples of some foods in each component and the nutrients each component provides.



## Child Nutrition Meal Components and Their Nutrient Contributions

### MEAT AND MEAT ALTERNATES

Meal Components	Examples of Some Foods	Nutrients <sup>1</sup>
Meat, fish, poultry, and eggs	Beef, chicken, fish, ham, pork, turkey, luncheon meats, sausages	Source of protein; iron, phosphorus, potassium, zinc, niacin, riboflavin, thiamin, vitamins B-6 and B-12; contain fat, saturated fat, and cholesterol
Nuts and seeds	Peanut butter, nut butters, almonds, walnuts, peanuts, seeds, other nuts	Source of protein and dietary fiber; copper, magnesium, phosphorus, niacin, vitamin E; contain fat
Dry beans and peas (can also count as a vegetable, but not in the same meal)	Black beans, chickpeas, kidney beans, lentils, Navy beans, peas, pinto beans, soy beans	Source of protein and complex carbohydrate (starch and dietary fiber); iron, magnesium, phosphorus, potassium, and folate
Cheese	American cheese, cottage cheese, cheddar, part-skim mozzarella, ricotta, Swiss, other cheese	Source of protein; calcium, phosphorus, vitamins A and B-12; contain fat, saturated fat, and cholesterol



## VEGETABLES AND FRUITS

Meal Components	Examples of Some Foods	Nutrients <sup>1</sup>
Citrus fruits, melon, berries	Oranges, grapefruit, citrus juices, cantaloupe, watermelon, strawberries	Source of carbohydrate and dietary fiber; potassium, folate, and vitamin C; deep yellow fruit source of vitamin A
Other fruit	Apple, apricot, banana, cherries, fruit juice, grapes, peach, pear, pineapple, plum, prunes, raisins	Source of carbohydrate and dietary fiber; potassium and vitamin C; deep yellow fruit source of vitamin A
Dark green, deep yellow vegetables	Broccoli, carrots, collard greens, green pepper, kale, pumpkin, spinach, sweet potatoes, winter squash	Source of dietary fiber; iron, magnesium, potassium, folate, riboflavin, and vitamins A and C
Starchy vegetables	Black-eyed peas, corn, lima beans, green peas, potatoes	Source of complex carbohydrate (starch and dietary fiber); iron, magnesium, potassium, folate, and vitamin C
Dry beans and peas (can also count as a meat alternate, but not in the same meal)	Black beans, chickpeas, kidney beans, lentils, Navy beans, peas, pinto beans, soy beans	Source of protein and complex carbohydrate (starch and dietary fiber); iron, magnesium, phosphorus, potassium, and folate
Other vegetables	Cabbage, cauliflower, celery, cucumbers, green beans, lettuce, okra, onions, summer squash, tomatoes, vegetable juice, zucchini	Source of dietary fiber; magnesium, potassium, folate, and vitamin C

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## BREAD AND BREAD ALTERNATES

Meal Components	Examples of Some Foods	Nutrients <sup>1</sup>
Enriched breads, cereals, pasta	Bagels, cornbread, grits, crackers, pasta, corn muffins, noodles, pita bread, ready-to-eat cereal, white bread, rolls	Source of complex carbohydrate (starch); thiamin, riboflavin, niacin, iron; some contain added fat
Whole-grain breads, cereals, pasta	Brown rice, corn tortillas, oatmeal, whole-grain rye bread, whole-grain ready-to-eat cereal, whole-wheat pasta, crackers, bread, rolls	Source of complex carbohydrate (starch and dietary fiber); copper, iron, magnesium, phosphorus, thiamin, riboflavin, niacin; some contain added fat

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## MILK

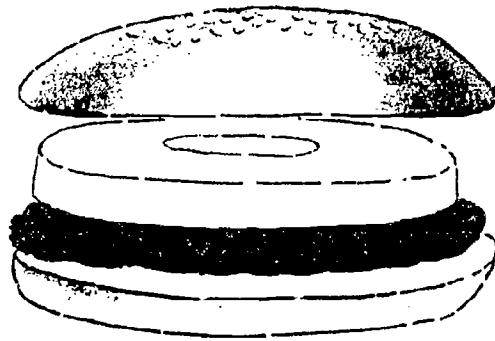
Meal Components	Examples of Some Foods	Nutrients <sup>1</sup>
Milk	Lowfat milk, lowfat flavored milk, skim milk, buttermilk, whole milk	Source of protein and carbohydrate; calcium, phosphorus, potassium, riboflavin, vitamins B-1 <sup>2</sup> and A and, if fortified, vitamin D; most contain fat, saturated fat, and cholesterol

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<sup>1</sup> The foods in the Meal Components column are sources of the identified nutrients. However, the amount of specific nutrients in individual foods varies. Foods also contain nutrients that are not listed.

### Increasing Variety

Meal planning usually begins with the main dish. Often, it includes foods from the meat or meat alternate component. Fruits, vegetables, and grains may be part of the main dish or served as side dishes or desserts. Milk serves as the beverage. One way to check for variety is to count the number of different foods served from each component in your cycle menu.

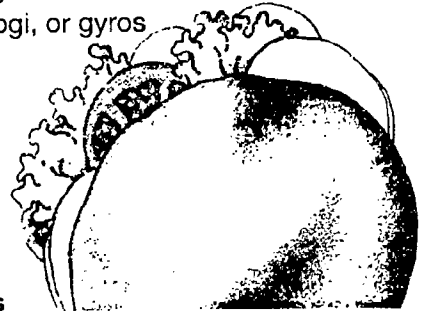


### Meat and Meat Alternates

This component includes numerous foods that can be prepared and served in many ways. Try to choose foods that are lower in fat and saturated fat.

- Combine ground turkey with lean ground beef or pork when you make a beef or pork barbecue

- Serve double decker club sandwiches on whole-wheat bread with roast turkey, cheese, tomatoes, and lettuce
- Add grapes or raisins to tuna, chicken, or turkey salad and stuff into whole-wheat pita bread
- Make a sandwich spread by combining peanut butter with raisins, pineapple, or apple chunks. Serve on whole-wheat bread
- Serve bean tacos, burritos, or chili
- Make an "Aloha-burger" by topping a lean hamburger with a slice of pineapple
- Try a regional favorite such as red beans and rice, pirogi, or gyros



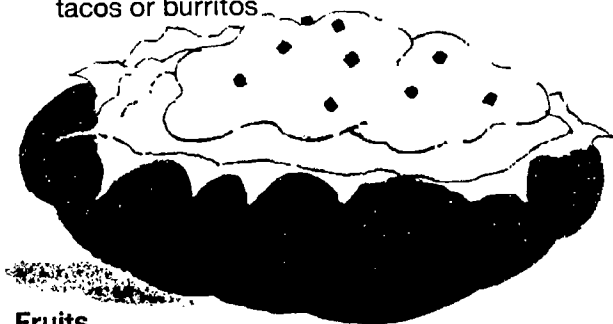
### Vegetables

How many kinds of vegetables did you serve last month?

Many of us serve the same vegetables in the same way—potatoes, tomatoes, lettuce, green beans, and corn—because we know that children and teens will eat them. This should not stop us

from featuring new vegetables or vegetable combinations each month.

- Serve carrot sticks with lowfat yogurt or salsa dip
- Add chopped raw spinach, other dark greens, or red cabbage for a colorful salad
- Top a baked potato with broccoli and a spoonful of lowfat yogurt
- Introduce favorite vegetables from other regions or countries. Try a southern favorite—black-eyed peas or black beans for a South American or Caribbean flavor
- Try new vegetable combinations. For color, texture, and flavor, add corn and red pepper to broccoli
- Serve whole or mashed pinto beans with tacos or burritos

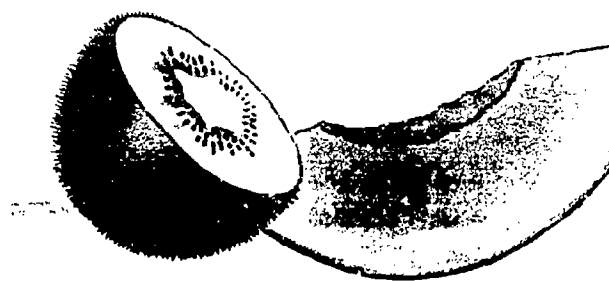


### Fruits

How often do the same fruits appear on your menu? How often do you serve canned mixed fruit, applesauce, peaches, pineapple, or pears?

Fruits are nature's sweets. Offer them frequently.

- Serve fresh fruits in season—pineapple, tangerines, peaches, plums, berries, oranges, apples, pears, bananas, cantaloupe, and grapes
- Add pieces of fresh or frozen fruit to canned fruit cups. Add berries or apple pieces to pineapple chunks
- Select canned fruits packed in light syrup or natural juice rather than in heavy syrup
- Replace higher fat desserts with fruit
- Add fruit to main dishes. Try peaches or apricots with baked chicken or turkey
- Introduce unfamiliar fruits, such as kiwi, figs, papaya, and mango, as part of classroom activities



### Bread and Bread Alternates

How often do you serve rice, pasta, or whole-grain breads?

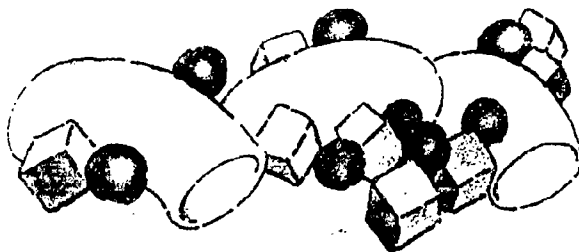
Grain products add variety and interest to meals. They are a source of vitamins and minerals and

are often low in fat. Whole-grain products are rich sources of fiber and a valuable source of some vitamins and minerals.

- Try serving spanish rice with tacos or burritos
- Combine cold pasta (spaghetti or macaroni) with ham or tuna, peas, carrots, onions, or green pepper. Add a small amount of dressing for a taste-pleasing pasta salad
- Serve fruit muffins made with whole-wheat flour or oatmeal
- Stuff pita bread with vegetables, cooked dry beans, and cheese
- Try whole-wheat crackers or cornbread with chili
- When serving bread or rolls, offer both whole-grain and enriched

### **Variety Is the Spice of Life**

Start with your current menus. Add one or two new items to your cycle menu each month. Offer new foods with popular menu items. Display them in appealing ways. Work with students, parents, and teachers to promote new foods. Get everyone involved. Remember, learning to try new things is an important developmental skill for children.



### **Promote Variety**

- Introduce new foods or a familiar food prepared in a different way
- Encourage students, student groups, or classes to suggest food items, recipes, or menus
- Involve children and teens in taste-testing new foods and recipes
- Work with students and teachers to develop special menus to highlight foods from a different region or a country they are studying
- Involve students, parent organizations, and local professionals in developing promotion campaigns to introduce foods or menus
- Set up student, teacher, and parent advisory groups for your program
- Snack time in the child-care setting provides an opportunity to introduce foods. If possible, have children help prepare the new food

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## Serve Meals That Help Maintain a Healthy Body and Weight

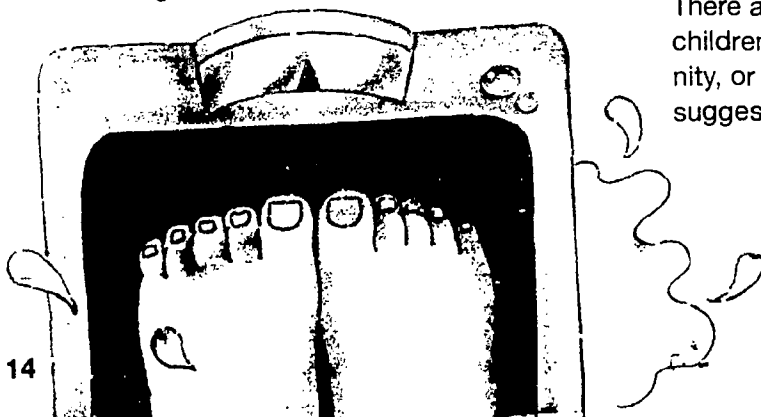
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Children need food and the calories it contains for growth and normal development. Calorie needs of children differ due to body size, growth spurts, and physical activity level.

Overweight children need special help from health professionals. Weight-loss diets are usually not recommended for children. Health professionals can advise on physical activities and on choosing diets with adequate but not excessive calories.

Serving a variety of foods can help children maintain a healthy body and weight.

- Serve plenty of fruits, vegetables, and grain products
- Serve less fat and fewer fatty foods
- Serve sugars and sweets only in moderation



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Following these recommendations will result in healthful meals for children and teens, whether they need to gain, maintain, or lose weight.

### Promote Physical Activity

Regular physical activity is important to maintaining health. It burns calories, helps with weight control, and is important in preventing some chronic diseases. While physical activity is not a responsibility of the Child Nutrition Programs, it is important to you as parents and members of the school and community.

How much activity should children get? Experts recommend that children engage in a minimum of 30 to 45 minutes of physical activity each day. For strength, flexibility, and heart and lung fitness, participating in games and other childhood activities may be important. For quieting restless spirits, short periods of active play may do the trick.

Physical activity is more than structured exercise. There are many types of physical activities that children enjoy at home, at school, in the community, or at child-care centers. Here are a few suggested activities for different age groups.

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### Younger Children—Preschool

Younger children, under the age of 6, don't usually have the skills needed for organized sports. For them, the best exercise is active play or games such as:

Running Games (Tag)

Jumping

Musical Chairs

Follow the Leader

Throwing and Catching Games

Duck, Duck, Goose

### Older Children—Ages 6-12

Older children have developed the motor skills for organized sports but may have a short attention span. Some activities for this age are:

Jumping Rope

Soccer

Walking

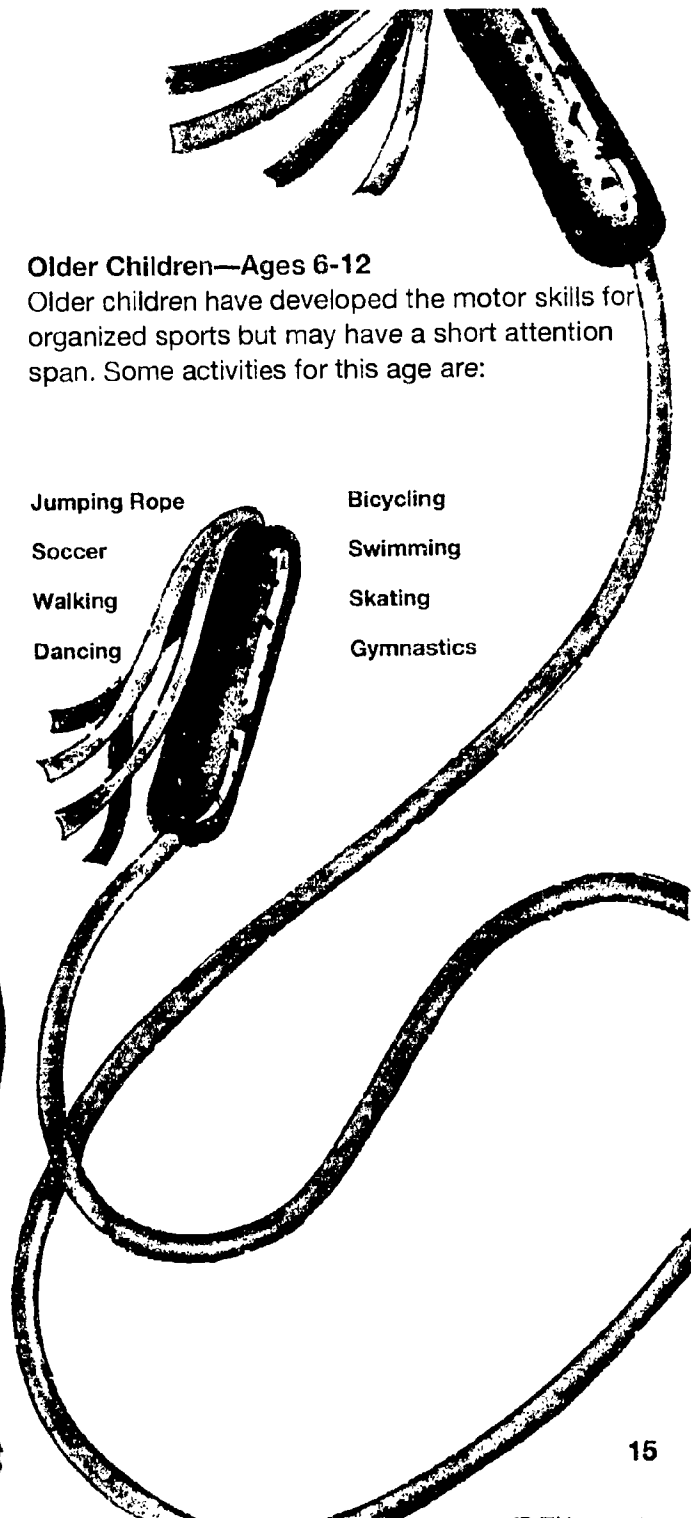
Dancing

Bicycling

Swimming

Skating

Gymnastics



### Teens—Ages 13-18

Teens have the motor skills and interest to participate in more advanced games and activities. Activities that encourage lifetime physical activity are particularly important.

Running/Jogging

Aerobics

Tennis

Dancing

Basketball

Racquetball

Swimming

Bicycling

Hiking

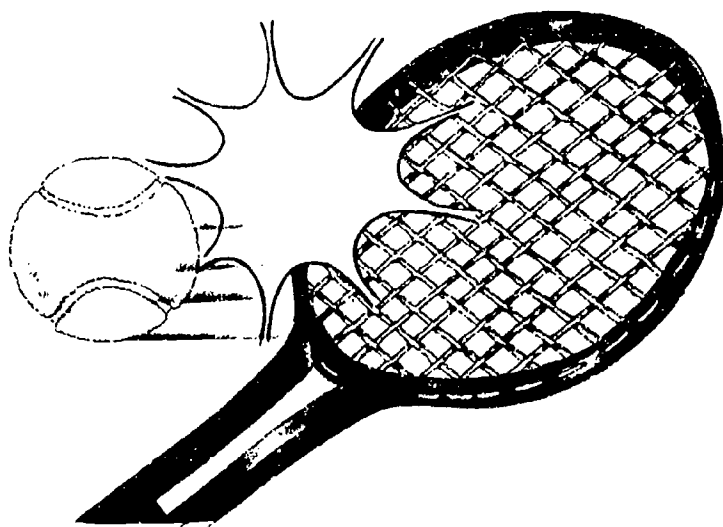
Hockey

Success in completing an activity motivates children and focuses on physical activity as its

own reward. Encourage all children—from those with physical disabilities to the athletically gifted—to learn, participate, and be recognized. Support the physical education department in their efforts to promote lifetime physical activity for all children through the physical education program.

#### ***Promote an Active Lifestyle by Suggesting Physical Activity***

- For fun and relaxation
- To promote a healthy heart
- To develop positive attitudes
- To strengthen bones and muscles
- To maintain a healthy weight
- To develop motor skills, balance, and coordination
- To increase energy
- To improve self-esteem





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## **Offer Foods Low in Fat, Saturated Fat, and Cholesterol**

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For most Americans, it is sensible to reduce daily intake of total fat, saturated fat, and cholesterol. The *Dietary Guidelines for Americans* suggest goals of 30 percent or less of total calories from fat, and less than 10 percent of calories from saturated fat. Why? Populations like ours with diets high in fat have more obesity and certain types of cancer. The higher levels of saturated fat and cholesterol in our diets are linked to our increased risk for heart disease. Of these two, saturated fat has a greater effect.

These goals are for healthy children and adults. They are not for those with medical problems (people who may have special dietary needs) or for those under 2 years old. At about 2 years of age, children should be encouraged to choose diets that are lower in fat and saturated fat and that provide the calories and nutrients they need for normal growth. Older children and adults with established food habits may need to change their diets gradually toward the goals. These goals for fats apply to the diet over several days, not to a single meal or food.

Current diets of many Americans are higher in fat and saturated fat than the Dietary Guidelines

suggest. For example, fat provides an average of 35 to 37 percent of calories per day depending on the age and sex of children studied.

Changes to reduce fat in meals must be practical and acceptable. Step-by-step changes in menus over time can achieve an average fat content of 30 percent of calories from fat.

### **How To Replace Fat Calories**

Lowering the fat content also lowers the calories in the meal. Fat contains over twice the calories of an equal amount of protein or carbohydrate. When fat is lowered in the meal, other foods will need to be added to replace those calories lost from fat. Although not all children may need the calories from these additional foods, the Child Nutrition Programs must meet the needs of those who do.



Grains, vegetables, and fruits are the best choices for adding calories when lowering the fat in meals. Younger children may have more difficulty eating these additional servings at one meal. People who work with young children should recognize that they often eat smaller, more frequent meals than older children and adults.

It is important to help children learn at a young age the importance of eating a lowfat, low saturated fat diet. While good eating habits are influenced by the eating patterns of the family, meals presented at school and child-care programs also play a role in future nutritional well-being.

#### Sources of Fat

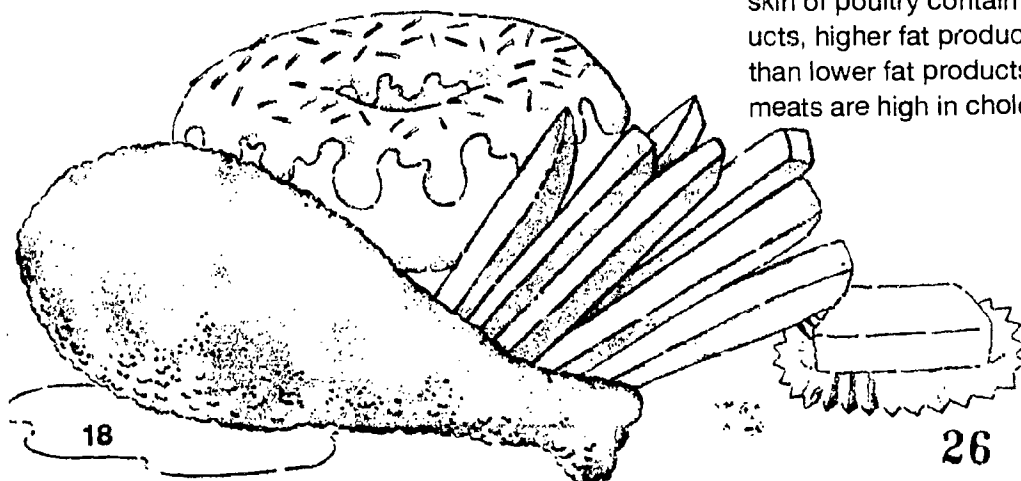
Some fats in the diet are easily identified. These include butter, margarine, vegetable oils, salad dressings, cream, and lard. Fats in other foods are less obvious. In general, foods that come

from animals (milk and meat, poultry and fish) are naturally higher in fat than foods that come from plants. However, products such as lean meat, lowfat milk, and chicken without skin have less fat than other animal products.

Most fruits, vegetables, and grain products are naturally low in fat. However, many popular items, such as french fried potatoes, croissants, and sweet rolls, are prepared with fat, thus making them high in fat.

All fats contain a mixture of saturated and unsaturated fat. **Saturated fats** are found in the largest amounts in animal products and some vegetable fats such as coconut, palm, and palm kernel oils. For more information about fats, see the glossary on page 42 and the Dietary Fat Chart on page 40.

**Cholesterol** is a fat like substance present in all animal foods. It is not found in plant foods. Both the lean and the fat of meat and the meat and skin of poultry contain cholesterol. In milk products, higher fat products contain more cholesterol than lower fat products. Egg yolks and organ meats are high in cholesterol.



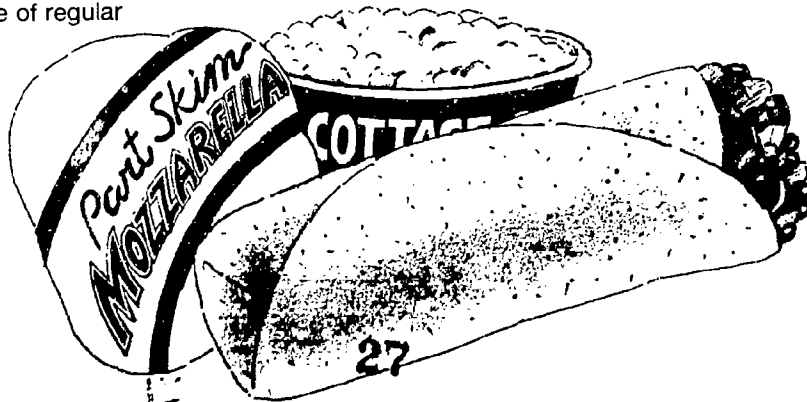
***Both animal and plant foods contribute important nutrients to the diets of children.***

- Offer plenty of vegetables, fruits, and grain products
- Offer lean meats, fish, poultry; cooked dry beans, peas, and lentils; and lowfat dairy products
- Use fats and oils sparingly in food preparation. Use the following ideas to offer more lowfat choices

### ***Tips To Lower Fat, Saturated Fat, and Cholesterol***

#### **MEAT AND MEAT ALTERNATES**

- Drain browned meat thoroughly before adding to other ingredients
- Replace part of the meat called for in recipes with cooked dry beans or canned beans
- Serve bean-based entrees such as bean burritos, tacos, and chili
- Choose ground turkey or lean ground beef in place of regular ground beef
- Trim fat from meat before and/or after cooking
- Roast meat, poultry, and fish on a rack so the fat will drain off
- Roast, bake, broil, or simmer meat, poultry, and fish
- Remove skin from poultry
- Chill meat or poultry broth until the fat becomes solid. Spoon off the fat before using the broth
- Use part-skim mozzarella cheese and lowfat cottage or ricotta cheese in recipes using cheese
- Adapt U.S. Department of Agriculture commodity specifications when writing them for your school



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### VEGETABLES AND FRUITS

- Steam, simmer, or bake vegetables. For a change, stirfry them in a small amount of vegetable oil
- Cook vegetables only until crisp to retain flavor and nutrients. This will reduce the need for added butter or margarine
- Substitute plain lowfat yogurt for part or all of the mayonnaise or creamy salad dressings in salads such as tuna or potato
- Season vegetables with herbs and spices rather than with butter or margarine
- Balance higher fat foods in menus with items lower in fat. For example, offer a baked potato instead of french fries with chicken nuggets
- Serve fruit for dessert in place of cookies, cakes, ice cream, and pies

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### BREAD AND BREAD ALTERNATES

- Replace higher fat grain products such as croissants, doughnuts, and sweet rolls with lower fat grain products such as bagels, muffins, pita, and pancakes
- Serve jam, jelly, or honey instead of butter or margarine on breads and rolls
- Increase the variety of lower fat grain products such as noodles, brown rice, barley, and bulgur

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### MILK

- Replace whole milk in puddings, soups, and baked products with skim, lowfat, or reconstituted nonfat dry milk
- Offer lowfat and skim milk to help decrease the fat content of meals (unflavored lowfat milk is required to be offered in school meals)
- Replace sour cream with plain lowfat yogurt, blender-whipped lowfat or skim milk cottage cheese, or buttermilk

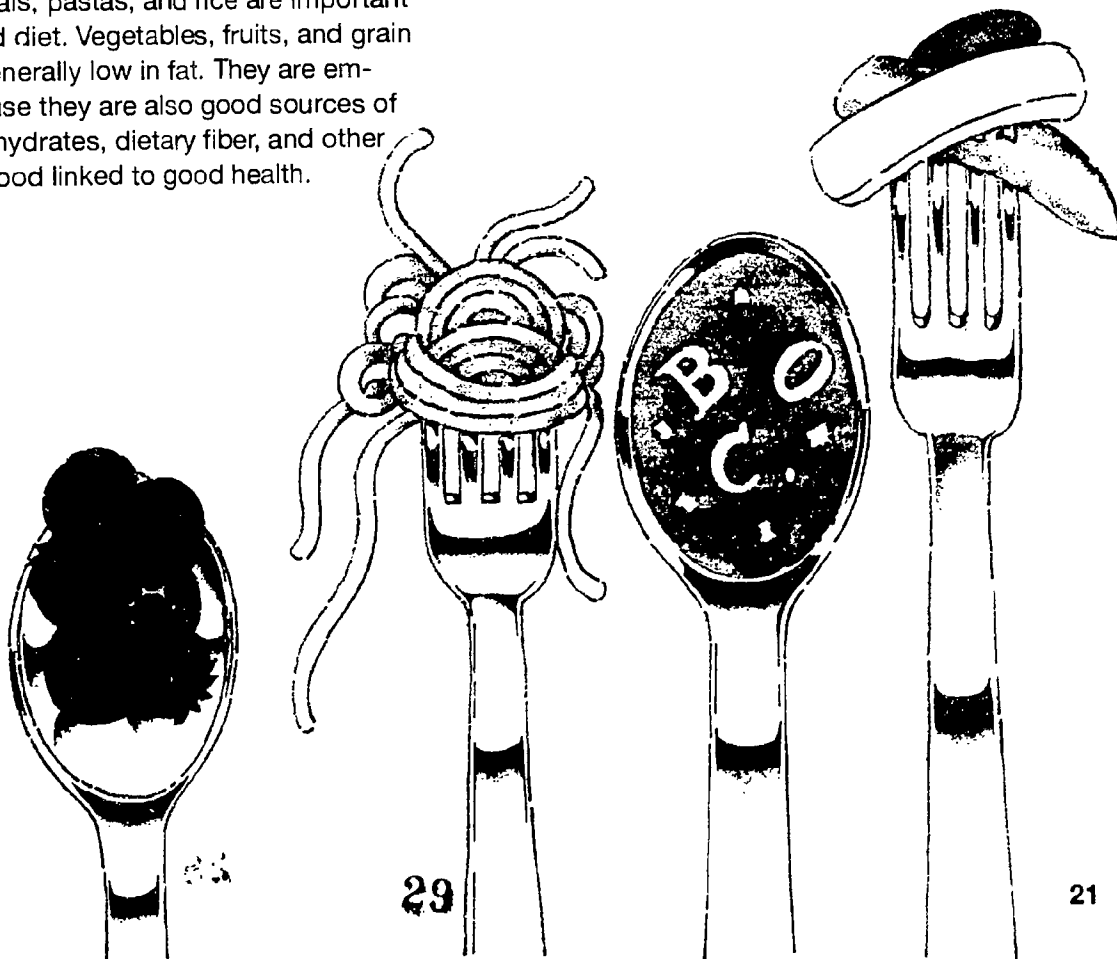
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## Serve Plenty of Vegetables, Fruits, and Grain Products

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The major sources of calories in the American diet are carbohydrates and fats. Carbohydrates from vegetables, fruits, and grain products such as breads, cereals, pastas, and rice are important parts of a varied diet. Vegetables, fruits, and grain products are generally low in fat. They are emphasized because they are also good sources of complex carbohydrates, dietary fiber, and other substances in food linked to good health.

Serving more foods containing complex carbohydrates can also help add fiber to the diet. Foods differ in the kinds of fiber they contain. Include a variety of fiber-rich foods, such as whole-grain breads and cereals, fruits, vegetables, and cooked dry beans, peas, and lentils.



### ***Tips To Add Vegetables, Fruits, and Grains***

#### **VEGETABLES**

- Offer vegetables higher in fiber such as cooked dry beans, broccoli, potatoes with skin, and carrots
- Offer a three-bean salad, cole slaw, or raw vegetable salad prepared with a lowfat dressing or marinade
- Add green pepper, mushrooms, and onions as pizza topping or add spinach to lasagna
- Serve fresh vegetable strips with lowfat yogurt dip
- Purchase or make vegetarian baked beans

#### **FRUITS**

- Add fresh or dried fruits to canned fruits
- Offer fresh fruits higher in fiber such as those with edible skins—apples, pears, nectarines, peaches—and those with edible seeds—berries, bananas
- Serve whole or cut-up fruits instead of fruit juice

#### **GRAINS**

- Make sandwiches with whole-wheat bagels, or use one slice whole-wheat bread and one slice white bread
- Buy or make quick breads, muffins, crackers, or cookies with whole grains or whole-grain flours
- Offer whole-grain breads and cereals at breakfast and for snacks
- Use rice, noodles, oats, corn-meal, or bulgur in main dishes
- Substitute whole-grain flour for part or all of the all-purpose flour used in recipes
- Read ingredient labels to determine what is in the product. Ingredients are listed in order by weight, from the greatest to the least. When flour is listed first, most of the carbohydrate is probably starch
- Serve different kinds of pasta salads for a change of pace

## ..... Offer and Use Sugars Only in Moderation .....

There are two main reasons children should be offered sugars only in moderation. First, sugars and many foods that contain them in large amounts supply calories, but may be limited in vitamins and minerals. Second, eating sugars can lead to tooth decay.

Sugars contribute calories but are limited in nutrients. They should be used in moderation by most healthy people and sparingly by people with low calorie needs. For active children and teens with high calorie needs, sugars can be an additional source of calories. Careful use of sugars in

foods served to older children may replace some of the calories lost from lowering fat in meals.

Both sugars and starches appear to increase the risk of tooth decay, especially when eaten between meals. Frequent between-meal snacks of foods such as cakes and pastries, candies, and dried fruits may be more harmful to children's teeth than sugars eaten with regular meals.

Foods contain sugars in various forms. Common table sugar (sucrose) is only one form. Other sugars—glucose, fructose, maltose, and lactose—occur naturally in foods. Some other forms of sugar include honey, maple syrup, and molasses. Processed sweeteners such as corn syrup (dextrose) or fruit juice concentrates are also added to foods.

### ***Tips on Sugars***

- Read ingredient labels for clues on sugar content. If the name sugar, sucrose, glucose, maltose, dextrose, lactose, fructose, honey, fruit juice concentrates, or syrups appears first or several times on the label, then the food probably contains a large amount of sugar
- Select fresh fruits or fruits processed in light syrup or in natural juice
- Select whole-grain or enriched grain products and cereals that list grain first, rather than sugar, in the ingredient list on the label
- Prepare cookies, cakes, and other desserts with less sugar

.....

### Offer and Use Salt and Sodium Only in Moderation

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Table salt contains sodium and chloride—both are essential in the diet. Most Americans eat more salt and sodium than they need.

Foods containing salt provide most of the sodium in the diet. Much of it is added during processing and manufacturing. Foods with added salt include cured and processed meats; cheeses; most snacks; ready-to-eat cereals, breads, and

bakery products; prepared frozen entrees and dinners; packaged mixes; canned soups; and salad dressings.

People who have high blood pressure are often advised to reduce their sodium intake. Some people may reduce their chance of getting high blood pressure by eating less salt. At the present, there is no way to predict who will develop high blood pressure. However, it is wise to serve foods lower in sodium and reduce or omit salt during food preparation. This may help some children avoid high blood pressure when they become adults.

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#### ***Tips on Salt and Sodium***

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- When serving salted snacks such as crackers, pretzels, and nuts, offer them in smaller amounts or use lightly salted types
- Gradually reduce the amount of salt in recipes
- Serve smaller amounts of condiments such as mustard, catsup, relish, and salad dressing
- When serving ready-made foods such as soups, meats, and main dishes, check the sodium content and select those lower in sodium
- Do not put salt on the table
- Season vegetables with other spices and herbs rather than salt



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## Promote an Alcohol- and Drug-Free Lifestyle

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Children and teens should not drink alcoholic beverages. Use of alcoholic beverages involves risks to health and other serious problems.

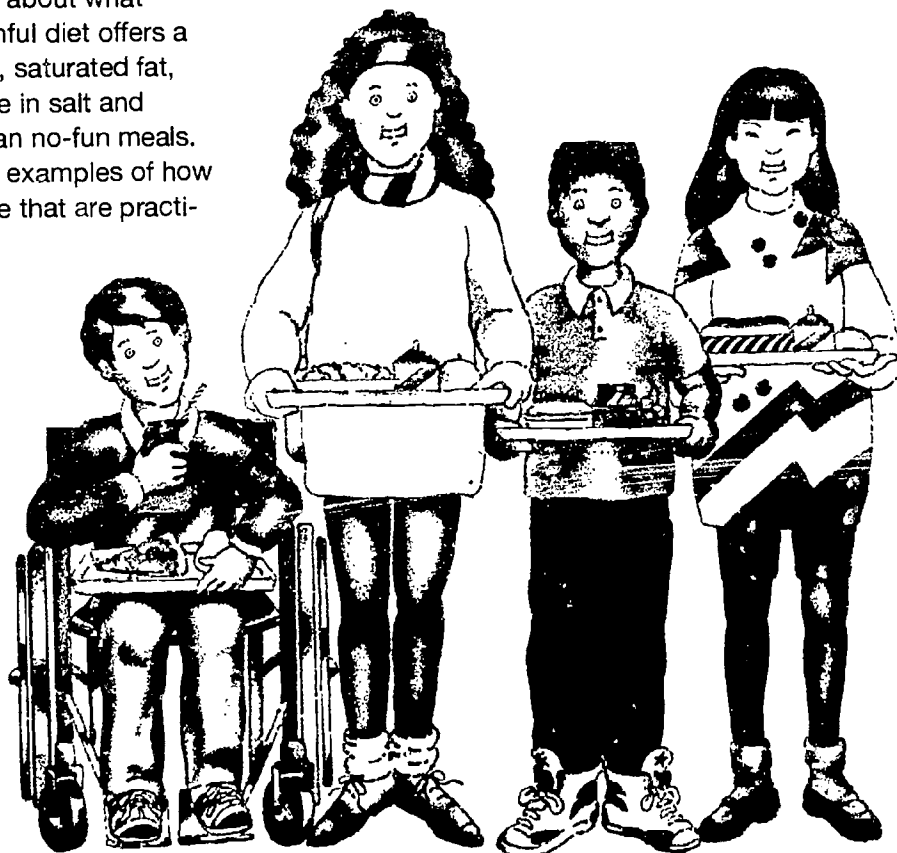
Support school programs promoting an alcohol- and drug-free lifestyle. Use cafeteria health fairs to promote these programs along with good eating habits. Work with others in the school and community to create an environment that supports alcohol and drug avoidance.



## Putting It All Together

You don't have to follow these menus exactly. They offer make-over suggestions. The idea is to **BALANCE** your menus. These examples show that popular foods have a place in meals served in the Child Nutrition Programs.

Planning menus means thinking about what foods to serve together. A healthful diet offers a variety of foods and is low in fat, saturated fat, and cholesterol, and is moderate in salt and sugar. Moderation does not mean no-fun meals. The following school menus are examples of how simple adaptations can be made that are practical and acceptable.



## ..... It's Simple To Make Menus Healthy .....

### Menu 1 Sample School Lunch

	Calories	Fat (grams)
Chicken nuggets (2 oz equivalent meat)	302	20
with BBQ sauce (2 Tbsp)	50	—
Deep fat french fries (1/2 cup)	90	5
with tomato catsup (1 Tbsp)	18	—
Italian bread (1 bread)	73	1
with butter (1 tsp)	34	4
Peaches in light syrup (1/4 cup fruit)	34	—
Whole milk (1 cup)	150	8
<b>Total:</b>	<b>751</b>	<b>38</b>

Numbers rounded after calculations.

### Menu 1 Make-Over

	Calories	Fat (grams)
Chicken nuggets (2 oz equivalent meat) with BBQ sauce (2 Tbsp)	302 50	20 —
Oven french fries (1/2 cup vegetable) with tomato catsup (1 Tbsp)	63 18	2 —
* Italian bread (2 breads) with margarine (1 tsp)	146 34	2 4
Peaches in light syrup (1/2 cup fruit)	69	—
1% Milk (1 cup)	102	3
<b>Total:</b>	<b>784</b>	<b>31</b>

Numbers rounded after calculations.

- Chicken nuggets, a popular fast food dish, can be balanced with lower fat items.
- Oven-fried potatoes are a lower fat version of a children's favorite.

### Menu 2 Sample School Lunch

	Calories	Fat (grams)
Ham and American process cheese (2 oz equivalent meat/meat alternate) on croissant (2 breads) with shredded lettuce garnish	379	23
Mayonnaise (1 tsp)	33	4
* Mexicali corn (1/4 cup vegetable)	58	2
Mixed canned fruit in light syrup (1/2 cup fruit)	69	—
Whole milk (1 cup)	150	8
<b>Total:</b>	<b>689</b>	<b>37</b>

Numbers rounded after calculations.

### Menu 2 Make-Over

	Calories	Fat (grams)
Ham and American process cheese (2 oz equivalent meat/meat alternate) on whole wheat pita (2 $\frac{1}{2}$ breads) with shredded lettuce garnish	372	12
Mustard (1 tsp)	5	—
* Mexicali corn (1/4 cup)	58	2
Banana slices (1/4 cup) and mixed canned fruit in light syrup (1/2 cup fruit)	103	—
2% Chocolate milk	179	5
<b>Total:</b>	<b>717</b>	<b>19</b>

Numbers rounded after calculations.

- Whole-wheat pita is lower in fat and adds fiber, vitamins, and minerals.
- Substitute mustard for mayonnaise to add flavor but lower fat.
- Add banana slices for variety and fiber.
- Offering lowfat flavored milk may get some children to choose milk.

## Taking Your Turn at Menu Make-Overs

### Menu 3

How would you change this menu to better reflect the Dietary Guidelines?  
Keep in mind the likes and dislikes of your customers.

	Calories	Fat (grams)
* Ground beef chili with beans (2 oz equivalent meat/meat alternate, 3/8 cup vegetable)	207	13
* Cornbread (1½ breads) with butter (1 tsp)	148 34	2 4
* Apple cobbler (1/2 cup fruit)	198	6
Whole milk (1 cup)	150	8
<b>Total:</b>	<b>737</b>	<b>33</b>

Numbers rounded after calculations.

(See next page for one possible solution.)

(See next page for one possible solution.)

[illegible]



### Menu 3 Make-Over—One Solution

	Calories	Fat (grams)
* Ground beef chili with beans (2 oz equivalent meat/meat alternate, 3/8 cup vegetable) over rice (1/2 cup)	207	13
	111	—
* Cornbread (1½ breads)	148	2
with butter (1 tsp)	34	4
* Orange-pineapple gelatin (1/2 cup fruit)	85	—
2% Milk (1 cup)	122	5
<b>Total:</b>	<b>707</b>	<b>24</b>

Numbers rounded after calculations.

#### Reasons for changes

- Addition of rice—Increased nutrients and more complex carbohydrates (or starch)
- Substitution of Orange-pineapple gelatin for Apple cobbler—Reduced fat, more vitamin C
- Substitution of 2% Milk for Whole milk—Reduced fat

The average calories of the 3-day sample menus was 726. The average calories for the 3 days of the **make-over** was 736. Are you surprised they are almost the same? The change is in the percentage of calories from fat. It was reduced from 45 percent to 30 percent. The make-over menus are also higher in some vitamins, minerals, and dietary fiber.

	Sample Menus	Make-over Menus
Average calories	726	736
Average percent of calories from fat	45%	30%

There are many possible solutions to these menu make-overs. You know the likes and dislikes of your customers. These must be kept in mind as you begin to make changes. The idea is to **BALANCE** the choices you offer over time, such as a cycle menu of several weeks or a month.

\*Starred items are recipes from PA-1371, *Quantity Recipes for School Food Service*.

Portion sizes are based on the National School Lunch Program meal pattern requirements for Group IV (Grades 4-12).

### ***How to Calculate the Percent of Calories From Fat***

1. Add up calories from each meal item = total calories
2. Add up grams of fat from each meal item = total fat grams
3. Multiply total grams of fat x 9 (9 calories per gram of fat) = total calories from fat
4. Divide total calories from fat (number 3) by total calories (number 1); then multiply x 100 = percent of total calories from fat.

For example, our menu make-over on page 33 was calculated as follows:

1. 707 calories
2. 24 grams of fat
3.  $24 \times 9 = 216$  calories from fat
4.  $\frac{216}{707} = .3055 \times 100 = 30.55$   
or 31% of calories from fat

## Appendix I

### Nutrition—Fact or Fiction?

This quiz will give you an idea of what you know about nutrition. Mark each question either **True** or **False**. After you have completed the quiz, check your answers on page 37.

- |     | True  | False |   |
|-----|-------|-------|---|
| 1.  | _____ | _____ | Children need nutrients that are different from the nutrients that older people need.   |
| 2.  | _____ | _____ | If you take vitamin pills, you won't have to eat anything other than the foods you like.  |
| 3.  | _____ | _____ | Dark green leafy vegetables, such as spinach or kale, are good sources of vitamins A and C.   |
| 4.  | _____ | _____ | Whole-wheat bread contains more of some nutrients than enriched white bread.  |
| 5.  | _____ | _____ | One way to decrease sodium content of foods is to use onion and garlic salts instead of table salt.   |
| 6.  | _____ | _____ | Mayonnaise contains less fat than butter or margarine.  |
| 7.  | _____ | _____ | Honey and brown sugar are more nutritious than table sugar.   |
| 8.  | _____ | _____ | Sodium information is provided on nutrition labels of many foods.   |
| 9.  | _____ | _____ | To reduce sodium, you can use condiments like soy sauce, mustard, salad dressings, pickles, and relishes instead of salt for flavoring foods. |
| 10. | _____ | _____ | Fruits contain cholesterol.   |

- 
11. \_\_\_\_\_ The average 12-ounce soft drink contains the equivalent of about 10 teaspoons of sugar.
12. \_\_\_\_\_ Fiber is only found in plant foods, such as fruits, vegetables, legumes, nuts, and grain products.
13. \_\_\_\_\_ Starchy foods, such as bread and potatoes, contain lots of calories.
14. \_\_\_\_\_ You can recognize whole-wheat bread by its color.
15. \_\_\_\_\_ Part-skim milk mozzarella cheese has less fat than process American cheese or natural cheddar cheese.
16. \_\_\_\_\_ Children who eat a lot of sugar are almost always overweight.
17. \_\_\_\_\_ Chicken without skin contains less fat than chicken with skin.
18. \_\_\_\_\_ If you exercise, you will eat too much.
19. \_\_\_\_\_ For nearly all foods, manufacturers must list any added sugars on the ingredient label.
20. \_\_\_\_\_ Fats contain more than twice as many calories as either carbohydrates (the sugars and starches) or protein.
21. \_\_\_\_\_ You can always tell how much sodium a product contains by tasting it.

### Answers: Nutrition—Fact or Fiction?

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1. **False** People need the same nutrients throughout life. What changes is the amount of each nutrient needed.
2. **False** No pill can substitute for a good diet. If your diet has too much fat, sugar, or sodium, or too little fiber, no pill will correct it. And if your diet lacks the nutrients you need, no pill will provide them as well as foods do.
3. **True** Other good sources of vitamin C are citrus fruit—oranges, tangerines, grapefruit—and melons, berries, cabbage, cauliflower, potatoes, tomatoes, broccoli, and green pepper. Good sources of vitamin A are deep yellow fruits and vegetables—apricots, carrots, sweet potatoes, and winter squash.
4. **True** Both enriched and whole-grain products are important sources of starch, thiamin, riboflavin, niacin, and iron, but whole grains are better sources of folacin, vitamin B-6, magnesium, zinc, and fiber.
5. **False** All seasoned salts contain sodium. Garlic and onion *powder* (not salt) provide flavor without added sodium.
6. **False** The amount of fat in a tablespoon of butter, margarine, or mayonnaise is about the same—11 grams of fat/tablespoon.
7. **False** Though honey and brown sugar contain traces of some vitamins and minerals, the amounts of these nutrients in such foods are too small to be important in the overall diet.
8. **True** Sodium content is listed on many, but not all, foods. Examples of ingredients that contain sodium include salt, monosodium glutamate (MSG), baking soda, baking powder, sodium benzoate, sodium caseinate, sodium citrate, sodium nitrite, sodium phosphate, sodium propionate, and sodium saccharin.

- 
9. **False** Many commercially prepared condiments are high in sodium. Other examples include catsup, barbecue sauce, Worcestershire sauce, steak sauce, bouillon, and chili sauce. Condiments lower in sodium include fresh lemon and garlic, vinegar and oil, herbs, and spices.
10. **False** Fruits, vegetables, and grains contain no cholesterol. Cholesterol is found only in foods of animal origin.
11. **True** Also, unlike milk, soft drinks contain only traces of some nutrients. Milk is a good source of calcium, riboflavin, vitamin B-12, and protein.
12. **True** Dietary fiber is the part of plants that humans cannot digest. There are several types of fiber, such as cellulose, pectin, lignin, and gums. Plants differ in the types and amounts of fiber they contain. Different types of fiber act differently in the body. It is important to eat a variety of plant foods to benefit from the different kinds of fiber.
13. **False** Starchy foods such as potatoes and bread are not as high in calories as many people think. A slice of bread has about 70 calories. One-half cup of baked potato is about 110 calories. Bread and potatoes are sources of essential nutrients and fiber and only a modest number of calories. Fats added to these foods increase calories.
14. **False** All whole-wheat bread is brown, but not all brown bread is whole-wheat. By law, bread that is labeled whole-wheat must be made from 100 percent whole-wheat flour. Wheat bread may be made from varying amounts of enriched white flour and whole-wheat flour. The type of flour listed first on the ingredient label is present in the largest amount. Sometimes a dark color is provided by caramel coloring which is also listed on the label.
15. **True** One ounce of part-skim milk mozzarella cheese has 5 grams of fat; 1 ounce of natural cheddar and 1 ounce of process American cheese each have 9 grams of fat.

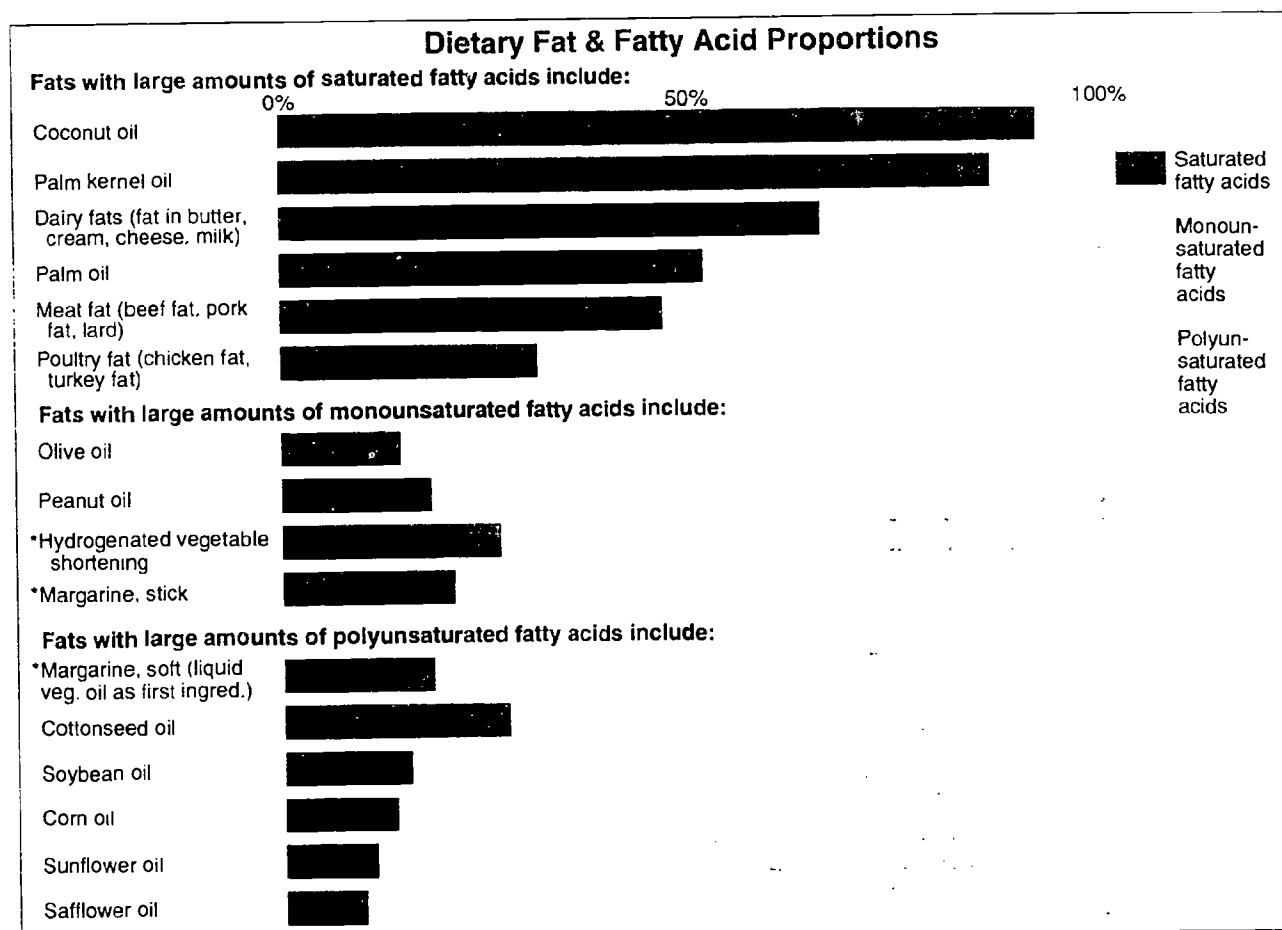
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16. **False**                      Overweight results from taking in more calories than are used, regardless of the calorie source. However, large intakes of sugar in a diet that contains too many total calories may lead to overweight.
17. **True**                        Chicken without skin contains only half as much total fat as chicken with skin.
18. **False**                        Exercise will not make you overeat. Regular exercise helps tone muscles, improve circulation, and strengthen the heart.
19. **True**                        The ingredient label gives a rough idea of the sugars in a product. The names of some sugars that manufacturers add to food are sucrose, glucose, dextrose, sorbitol, fructose, maltose, lactose, mannitol, honey, corn syrup, high-fructose corn syrup, molasses, maple syrup, and fruit juice concentrates (apple, pear, grape). Ingredients are listed on the label in order by weight—from the most to the least.
20. **True**                        Fats have more than twice the calories of proteins or carbohydrates. Fats have 9 calories per gram. Proteins and carbohydrates have 4 calories per gram.
21. **False**                        Taste is not a good indicator of sodium content. Heavily salted foods do not always taste salty and salt is not the only source of sodium.

## Appendix II

## Dietary Fat Chart

All dietary fats are made up of mixtures of **saturated**, **polyunsaturated**, and **monounsaturated** fatty acids. (See glossary on page 42 for definitions.) *The Dietary Guidelines for Americans* suggest limiting intake of

saturated fatty acids to about one-third of total fat. The shaded bars in the chart below show the proportions of different fatty acids in fats from different sources.



\* The amounts of unsaturated fatty acids in these foods vary. Chart from Home and Garden Bulletin No. 232-8, *Preparing Foods and Planning Menus*, USDA, Human Nutrition Information Service.



## Appendix III

## Advice on Feeding Children in Child Care

Young children need nutritious food at frequent intervals. Serving food frequently keeps children from becoming overtired and irritable. However, it is important to allow sufficient time between meals and snacks.

Pleasant eating experiences are as important as nutritious foods. They provide pleasant associations with food and eating. Food habits and attitudes that form during the preschool years remain with most people throughout life.

### Introducing New Foods

- Introduce only one new food at a time. Offer a very small amount at first. Allow plenty of time for children to look at and examine the foods.
- If children turn down a new food, wait a few days and let them try it again.

### Encouraging Good Eating Habits

- Encourage children to help by setting the table, bringing food to the table, or cleaning their own space after eating.
- Serve foods family style. An adult should eat at the table with the children. Give small servings and offer second helpings.
- Let children do as much for themselves as they are able to do. First efforts may be awkward but should be encouraged.
- Children may be in no hurry to eat once the first edge is taken off their hunger. They do not have adults' sense of time. Urging them to hurry may spoil their pleasure in eating.

- Deemphasize the "clean plate" idea. Children may rebel if forced to eat unwanted food. Children may also learn to overeat if told too often to finish their meals.
- Children may go on food "jags" and eat two or three servings of one food at one meal. Given time they will settle down and eat a normal meal.
- Do not let children use food to gain attention, such as by refusing to eat or making special demands.

### Examples of Healthful Finger Food for Younger Children

Apple wedges	Melon cubes
Banana slices	Orange sections
Berries	Peach wedges
Broccoli flowerets	Pear wedges
Carrot sticks	Pineapple sticks
Cauliflowerets	Pitted plums
Celery sticks	Pitted prunes
Cheese cubes	Raisins
Dried peaches	Tangerine sections
Dried pears	Tomato wedges
Grapefruit sections (seeded)	Turnip sticks
Green pepper sticks	Zucchini sticks

### Planning Foods for Infants

Feeding infants is outside the scope of this publication. However, if you do have this as part of your responsibility, and would like additional information, please request *Feeding Infants - A Guide for Use in the Child Care Food Program*, FNS-258, from your State agency or FNS Regional Office.

## Appendix IV

## Glossary

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**Calories** - a measure of the energy supplied by food when it is used by the body. Calories (energy) are supplied by carbohydrates, fat, and protein. (The alcohol in beer, wine, and liquor also supplies calories.)

**Carbohydrates** - include starch, sugar, and dietary fiber. Starch and sugar supply the body with energy. Dietary fiber provides bulk to the diet. Each gram of starch and sugar supplies about 4 calories.

**Cholesterol** - a fat like substance found in the body cells of humans and animals. Cholesterol is needed to form hormones, cell membranes, and other body substances. The body is able to make the cholesterol it needs for these functions. Cholesterol is present in all animal foods—in the muscle and fat of meat, poultry, and fish, in milk and milk products, and in egg yolks. Cholesterol is not found in foods of plant origin.

**Community nutrition professionals** - include county extension service, local or county health departments, dietetic association, school food service association, State home economics association, home economics teachers, public health nutritionists, and registered dietitians in hospitals and other community organizations.

**Enriched grains** - grains that have vitamins and minerals added to replace those nutrients lost during the process of milling or refining.

**Fats** - provide energy and are carriers for fat-soluble vitamins. Some fats help form cell membranes and hormones. They are also the most concentrated sources of food energy (calories). Each gram of fat supplies about 9 calories, more than twice the amount in protein and carbohydrate. Some fats provide linoleic acid, an essential fatty acid, which is needed by everyone in small amounts.

**Fatty acids** - the basic chemical units of fat. They may be either saturated, monounsaturated, or polyunsaturated. Dietary fats are made up of mixtures of these fatty acids. The fatty acids differ in the amount of hydrogen they contain. Saturated fatty acids contain the most hydrogen and polyunsaturated the least.

*Saturated fatty acids* - found in largest proportions in fats of animal origin. These include the fats in whole milk, cream, cheese, butter, meat, and poultry. Saturated fatty acids are also found in large amounts in some vegetable oils, including coconut and palm kernel.

*Polyunsaturated fatty acids* - found in largest proportions in fats of plant origin. Sunflower, corn, soybean, cottonseed, and safflower oils are vegetable oils that contain a high proportion of polyunsaturated fatty acids. Some fish are also sources of polyunsaturated fatty acids.

*Monounsaturated fatty acids* - found in fats of both plant and animal origin. Olive oil and peanut oil are examples of fat with mostly monounsaturated fatty acids. Many margarines and hydrogenated vegetable shortenings also are high in monounsaturated fatty acids.

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**Fiber (dietary)** - parts of plants that cannot be digested, adding bulk to the diet and moving waste through the digestive system.

**Hydrogenated shortenings** - hydrogenation makes vegetable oils more solid at room temperature. Liquid oils tend to be higher in polyunsaturated fatty acids than shortenings, stick margarine, and other fats that are partially hydrogenated.

**Ingredient labeling** - a list of ingredients on labels of most packaged and processed foods. Ingredients are listed in order, by weight, from the greatest to the least.

**Milk -**

*Skim Milk* - less than 0.5 percent milk fat.

*Lowfat Milk* - may contain 0.5, 1, 1.5, or 2 percent-milk fat.

*Whole Milk* - not less than 3.25 percent milk fat.

**Minerals** - needed in relatively small amounts. They are used to build strong bones and teeth, and to make hemoglobin in red blood cells. They help maintain body fluids and help in other chemical reactions in the body.

**Nutrition labeling** - nutrition information provided by many manufacturers on the label. This information is usually not provided on institutional pack sizes.

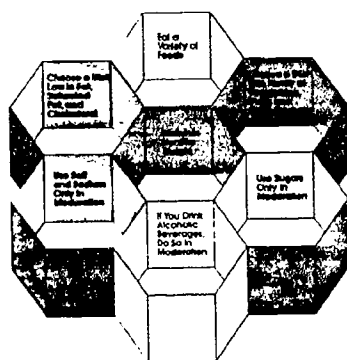
**Proteins** - composed of amino acids. They are needed for growth, maintenance, and replacement of body cells. They also form the hormones and enzymes used to regulate body processes. Extra protein is used for energy or stored as body fat. Each gram of protein supplies about 4 calories.

**Sodium** - a mineral that occurs naturally in some foods. Table salt contains sodium and chloride. It is added to many processed foods and beverages.

**Vitamins** - organic substances needed by the body in very small amounts. They do not supply energy, but they help release energy from carbohydrates, fats, and proteins. They also help in other chemical reactions in the body.

**Water** - often called the "forgotten nutrient." It is needed to replace body water lost in urine and sweat. Water helps to transport nutrients, remove wastes, and regulate body temperature.

**Whole-grain** - products that contain the entire grain, or all the grain that is edible. This includes the bran and germ portions which contain most of the fiber, vitamins, and minerals, as well as the starchy endosperm. Some examples of whole grains include whole wheat, cracked wheat, bulgur, oatmeal, whole cornmeal, brown rice, whole rye, and Scotch barley.



What should Americans eat to stay healthy?

These guidelines help answer this question. They are advice for healthy Americans ages 2 years and over—not for younger children and infants, whose dietary needs differ. The guidelines reflect recommendations of nutrition authorities who agree that enough is known about diet's effect on health to encourage certain dietary practices by Americans (see page 59).

Many American diets have too many calories and too much fat (especially saturated fat), cholesterol, and sodium. They also have too little complex carbohydrates and fiber. Such diets are one cause of America's high rates of obesity and of certain diseases—heart disease, high blood pressure, stroke, diabetes, and some forms of cancer. The exact role of diet in some of these is still being studied.

Diseases caused by vitamin and mineral deficiencies are rare in this country. But some people do not get recommended amounts of a few nutrients, especially calcium and iron.

Food alone cannot make you healthy. Good health also depends on your heredity, your environment, and the health care you get. Your lifestyle is also important to your health—how much you exercise and whether you smoke, drink alcoholic beverages to excess, or abuse drugs, for example. But a diet based on these guidelines can help you keep healthy and may improve your health.

The first two guidelines form the framework for the diet: "Eat a variety of foods" for the nutrients

#### **Dietary Guidelines for Americans**

- Eat a variety of foods
- Maintain healthy weight
- Choose a diet low in fat, saturated fat, and cholesterol
- Choose a diet with plenty of vegetables, fruits, and grain products
- Use sugars only in moderation
- Use salt and sodium only in moderation
- If you drink alcoholic beverages, do so in moderation.

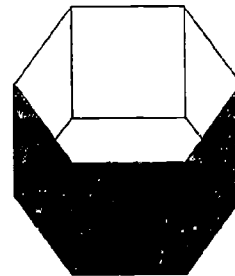
you need and for energy (calories) to "Maintain healthy weight." The next two guidelines stress the need for many Americans to change their diets to be lower in fat, especially saturated fat, and higher in complex carbohydrates and fiber. Other guidelines suggest only moderate use of sugars, salt, and, if used at all, alcoholic beverages.

These guidelines call for moderation—avoiding extremes in diet. Both eating too much and eating too little can be harmful. Also, be cautious of diets based on the belief that a food or supplement alone can cure or prevent disease.

Your good health may depend on your learning more about yourself. Are you at your healthy weight? Are your blood pressure and your blood cholesterol levels too high? If so, diet or medicine your doctor prescribes may help reduce them. Generally, the sooner a problem is found, the easier it is to treat.

The foods Americans have to choose from are varied, plentiful, and safe to eat. These guidelines can help you choose a diet that is both healthful and enjoyable.

Read on for more about each guideline—what it means, how it is important to health, brief "advice for today," and some tips on using the guideline. See page 59 for how to get more help.



### **Eat a Variety of Foods**

You need more than 40 different nutrients for good health. Essential nutrients include vitamins, minerals, amino acids from protein, certain fatty acids from fat, and sources of calories (protein, carbohydrates, and fat).

These nutrients should come from a variety of foods, not from a few highly fortified foods or supplements. Any food that supplies calories and nutrients can be part of a nutritious diet. The content of the total diet over a day or more is what counts.

Many foods are good sources of several nutrients. For example, vegetables and fruits are important for vitamins A and C, folic acid, minerals, and fiber. Breads and cereals supply B vitamins, iron, and protein; whole-grain types are also good sources of fiber. Milk provides protein, B vitamins, vitamins A and D, calcium, and phosphorus. Meat, poultry, and fish provide protein, B vitamins, iron, and zinc.

No single food can supply all nutrients in the amounts you need. For example, milk supplies calcium but little iron; meat supplies iron but little calcium. To have a nutritious diet, you must eat a variety of foods.

One way to assure variety—and with it, an enjoyable and nutritious diet—is to choose foods each day from five major food groups (see box). Individuals who do not eat foods from one or more of the food groups may want to contact a dietitian for help in planning how to meet nutritional needs.

People who are inactive or are trying to lose weight may eat little food. They need to take special care to choose lower calorie, nutrient-rich foods from the five major food groups. They also need to eat less of foods high in calories and low in essential nutrients, such as fats and oils, sugars, and alcoholic beverages.

Diets of some groups of people are notably low in some nutrients. Many women and adolescent girls need to eat more calcium-rich foods, such as milk and milk products, to get the calcium they need for healthy bones throughout life. Young children, teenage girls, and women of childbearing age must take care to eat enough iron-rich foods such as lean meats; dry beans; and whole-grain and iron-enriched breads, cereals, and other grain products.

### **A Daily Food Guide**

Eat a variety of foods daily, choosing different foods from each group. Most people should have at least the lower number of servings suggested from each food group. Some people may need more because of their body size and activity level. Young children should have a variety of foods but may need small servings.

Food group	Suggested servings
Vegetables	3-5 servings (see p. 54) <sup>1</sup>
Fruits	2-4 servings (see p. 54)
Breads, cereals, rice, and pasta	6-11 servings (see p. 54)
Milk, yogurt, and cheese	2-3 servings (see p. 52)
Meats, poultry, fish, dry beans and peas, eggs, and nuts	2-3 servings (see p. 52)

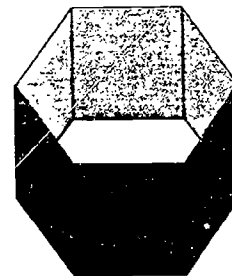
<sup>1</sup>See pages noted for help on how to choose foods to follow the other guidelines and on what counts as a serving.

Source: USDA's Food Guide (see page 59).

Supplements of some nutrients taken regularly in large amounts can be harmful. Vitamin and mineral supplements at or below the Recommended Dietary Allowances (RDA) are safe, but are rarely needed if you eat a variety of foods. Here are exceptions in which your doctor may recommend a supplement:

- Pregnant women often need an iron supplement. Some other women in their childbearing years may also need an iron supplement to help replace iron lost in menstrual bleeding.
- Certain women who are pregnant or breastfeeding may need a supplement to meet their increased requirements for some nutrients.
- People who are unable to be active and eat little food may need supplements.
- People, especially older people, who take medicines that interact with nutrients may need supplements.

**Advice for today:** Get the many nutrients your body needs by choosing different foods you enjoy eating from these five groups daily: vegetables, fruits, grain products, milk and milk products, and meats and meat alternatives.



### **Maintain Healthy Weight**

If you are too fat or too thin, your chances of developing health problems are increased.

Being too fat is common in the United States. It is linked with high blood pressure, heart disease, stroke, the most common type of diabetes, certain cancers, and other types of illness.

Being too thin is a less common problem. It occurs with anorexia nervosa and is linked with osteoporosis in women and greater risk of early death in both women and men.

Whether your weight is "healthy" depends on how much of your weight is fat, where in your body the fat is located, and whether you have weight-related medical problems, such as high blood pressure, or a family history of such problems.

What is a healthy weight for you? There is no exact answer right now. Researchers are trying to develop more precise ways to describe healthy weight. In the meantime, you can use the guide-

lines suggested below to help judge if your weight is healthy.

See if your weight is within the range suggested in the table for persons of your age and height. The table shows higher weights for people 35 years and above than for younger adults. This is because recent research suggests that people can be a little heavier as they grow older without added risk to health. Just how much heavier is not yet clear. The weight ranges given in the table are likely to change based on research under way.

Ranges of weights are given in the table because people of the same height may have equal amounts of body fat but differ in muscle and bone. The higher weights in the ranges are suggested for people with more muscle and bone.

Weights above the range are believed to be unhealthy for most people. Weights slightly below the range may be healthy for some small-boned people but are sometimes linked to health problems, especially if sudden weight loss has occurred.

Research also suggests that, for adults, body shape as well as weight is important to health. Excess fat in the abdomen is believed to be of greater health risk than that in the hips and thighs. There are several ways to check body

**Table. Suggested Weights for Adults**

Height <sup>1</sup>	Weight in pounds <sup>2</sup>	
	19 to 34 years	35 years and over
5'0"	97-128	108-138
5'1"	101-132	111-143
5'2"	104-137	115-148
5'3"	107-141	119-152
5'4"	111-146	122-157
5'5"	114-150	126-162
5'6"	118-155	130-167
5'7"	121-160	134-172
5'8"	125-164	138-178
5'9"	129-169	142-183
5'10"	132-174	146-188
5'11"	136-179	151-194
6' 0"	140-184	155-199
6' 1"	144-189	159-205
6' 2"	148-195	164-210
6' 3"	152-200	168-216
6' 4"	156-205	173-222
6' 5"	160-211	177-228
6' 6"	164-216	182-234

<sup>1</sup>Without shoes.

<sup>2</sup>Without clothes.

<sup>3</sup>The higher weights in the ranges generally apply to men, who tend to have more muscle and bone; the lower weights more often apply to women, who have less muscle and bone.

Source: Derived from National Research Council, 1989 (see page 59).



shape. Some require the help of a doctor; others you can do yourself.

A look at your profile in the mirror may be enough to make it clear that you have too much fat in the abdomen. Or you can check your body shape this way:

- Measure around your waist near your navel while you stand relaxed, not pulling in your stomach.
- Measure around your hips, over the buttocks, where they are largest.
- Divide the waist measure by the hips measure to get your waist-to-hip ratio. Research in adults suggests that ratios close to or above one are linked with greater risk for several diseases. However, ratios have not been defined for all populations or age groups.

If your weight is within the range in the table, if your waist-to-hip ratio does not place you at risk, and if you have no medical problem for which your doctor advises you to gain or lose weight, there appears to be no health advantage to changing your weight. If you do not meet all of these conditions, or if you are not sure, you may want to talk to your doctor about how your weight might affect your health and what you should do about it.

Heredity plays a role in body size and shape as do exercise and what you eat. Some people seem to be able to eat more than others and still maintain a good body size and shape.

No one plan for losing weight is best for everyone. If you are not physically active, regular exercise may help you lose weight and keep it off. See page 50 for the calories expended in some activities. If you eat too much, decreasing your calorie intake as advised on page 50 may help. However, getting enough of some nutrients is difficult in diets of 1,200 calories or less. Long-term success usually depends upon new and better lifelong habits of both exercise and eating.

Do not try to lose weight too fast. A steady loss of 1/2 to 1 pound a week until you reach your goal is generally safe. Avoid crash weight-loss diets that severely restrict the variety of foods or the calories you can have.

Avoid other extreme approaches to losing weight. These include inducing vomiting and using medications such as laxatives, amphetamines, and diuretics. Such approaches are not appropriate for losing weight and can be dangerous.

You probably do not need to try to lose weight if your weight is already below the suggested range in the table and if you are otherwise healthy. If you lose weight suddenly or for unknown reasons, see a doctor. Unexplained weight loss may be an early clue to a health problem.

Children need calories to grow and develop normally; weight-reducing diets are usually not recommended for them. Overweight children may need special help in choosing physical activities they enjoy and nutritious diets with adequate but not excessive calories.

**Advice for today:** Check to see if you are at a healthy weight. If not, set reasonable weight goals and try for long-term success through better habits of eating and exercise. Have children's heights and weights checked regularly by a doctor.

#### TO DECREASE CALORIE INTAKE—

Eat a variety of foods that is low in calories and high in nutrients:

- Eat less fat and fatty foods.
  - Eat more fruits, vegetables, and breads and cereals—without fats and sugars added in preparation and at the table.
  - Eat less sugars and sweets.
  - Drink little or no alcoholic beverages.
- Eat smaller portions; limit second helpings.

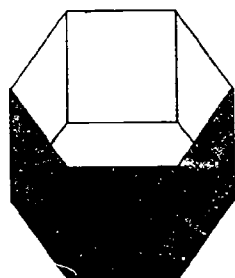
#### TO INCREASE CALORIE EXPENDITURE— be more physically active.

Activity	Calories expended per hour <sup>1</sup>	
	Man <sup>2</sup>	Woman <sup>2</sup>
Sitting quietly	100	80
Standing quietly	120	95
Light activity:	300	240
Cleaning house		
Office work		
Playing baseball		
Playing golf		
Moderate activity:	460	370
Walking briskly (3.5 mph)		
Gardening		
Cycling (5.5 mph)		
Dancing		
Playing basketball		
Strenuous activity:	730	580
Jogging (9 min./mile)		
Playing football		
Swimming		
Very strenuous activity:	920	740
Running (7 min./mile)		
Racquetball		
Skiing		

<sup>1</sup>May vary depending on environmental conditions.

<sup>2</sup>Healthy man, 175 lbs; healthy woman, 140 lbs.

Source: Derived from McArdle, et.al., *Exercise Physiology*, 1986.



### Choose a Diet Low in Fat, Saturated Fat, and Cholesterol

Most health authorities recommend an American diet with less fat, saturated fat, and cholesterol. Populations like ours with diets high in fat have more obesity and certain types of cancer. The higher levels of saturated fat and cholesterol in our diets are linked to our increased risk for heart disease.

A diet low in fat makes it easier for you to include the variety of foods you need for nutrients without exceeding your calorie needs because fat contains over twice the calories of an equal amount of carbohydrates or protein.

A diet low in saturated fat and cholesterol can help maintain a desirable level of blood cholesterol. For adults this level is below 200 mg/dl. As blood cholesterol increases above this level, greater risk for heart disease occurs. Risk can also be increased by high blood pressure, cigarette smoking, diabetes, a family history of

premature heart disease, obesity, and being a male.

The way diet affects blood cholesterol varies among individuals. However, blood cholesterol does increase in most people when they eat a diet high in saturated fat and cholesterol and excessive in calories. Of these, dietary saturated fat has the greatest effect; dietary cholesterol has less.

Suggested goals for fats in American diets are as follows:

**Total fat.** An amount that provides 30 percent or less of calories is suggested. Thus, the upper limit on the grams of fat in your diet depends on the calories you need. For example, at 2,000 calories per day, your suggested upper limit is 600 calories from fat ( $2,000 \times .30$ ). This is equal to 67 grams of fat ( $600 \div 9$ , the number of calories each gram of fat provides). The grams of fat in some foods are shown in the box.

**Saturated fat.** An amount that provides less than 10 percent of calories (less than 22 grams at 2,000 calories per day) is suggested. All fats contain both saturated and unsaturated fat (fatty acids). The fats in animal products are the main sources of saturated fat in most diets, with tropical oils (coconut, palm kernel, and palm oils) and hydrogenated fats providing smaller amounts.

**Cholesterol.** Animal products are the source of all dietary cholesterol. Eating less fat from

animal sources will help lower cholesterol as well as total fat and saturated fat in your diet.

These goals for fats are not for children under 2 years, who have special dietary needs. As children begin to eat with the family, usually at about 2 years of age or older, they should be encouraged to choose diets that are lower in fat and saturated fat and that provide the calories and nutrients they need for normal growth. Older children and adults with established food habits may need to change their diets gradually toward the goals.

These goals for fats apply to the diet over several days, not to a single meal or food. Some foods that contain fat, saturated fat, and cholesterol, such as meats, milk, cheese, and eggs, also contain high-quality protein and are our best sources of certain vitamins and minerals. Lowfat choices of these foods are lean meat and lowfat milk and cheeses.

**Advice for today:** Have your blood cholesterol level checked, preferably by a doctor. If it is high, follow the doctor's advice about diet and, if necessary, medication. If it is at the desirable level, help keep it that way with a diet low in fat, saturated fat, and cholesterol: Eat plenty of vegetables, fruits, and grain products; choose lean meats, fish, poultry without skin, and lowfat dairy products most of the time; and use fats and oils sparingly.

### **For A Diet Low in Fat, Saturated Fat, and Cholesterol**

#### **Fats and oils**

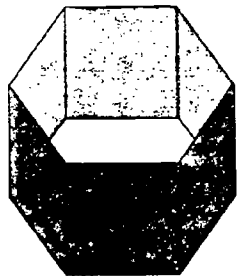
- Use fats and oils sparingly in cooking.
- Use small amounts of salad dressings and spreads, such as butter, margarine, and mayonnaise. One tablespoon of most of these spreads provides 10 to 11 grams of fat.
- Choose liquid vegetable oils most often because they are lower in saturated fat.
- Check labels on foods to see how much fat and saturated fat are in a serving.

#### **Meat, poultry, fish, dry beans, and eggs**

- Have two or three servings, with a daily total of about 6 ounces. Three ounces of cooked lean beef or chicken without skin—the size of a deck of cards—provides about 6 grams of fat.
- Trim fat from meat; take skin off poultry.
- Have cooked dry beans and peas instead of meat occasionally.
- Moderate the use of egg yolks and organ meats.

#### **Milk and milk products**

- Have two or three servings daily. (Count as a serving: 1 cup of milk or yogurt or about 1–1/2 ounces of cheese.)
- Choose skim or lowfat milk and fat-free or lowfat yogurt and cheese most of the time. One cup of skim milk has only a trace of fat, 1 cup of 2-percent-fat milk has 5 grams of fat, and 1 cup of whole milk has 8 grams of fat.



### **Choose a Diet with Plenty of Vegetables, Fruits, and Grain Products**

This guideline recommends that adults eat at least three servings of vegetables and two servings of fruits daily. It recommends at least six servings of grain products, such as breads, cereals, pasta, and rice, with an emphasis on whole grains. (See box on page 54 for what to count as a serving.) Children should also be encouraged to eat plenty of these foods.

Vegetables, fruits, and grain products are important parts of the varied diet discussed in the first guideline. They are emphasized in this guideline especially for their complex carbohydrates, dietary fiber, and other food components linked to good health.

These foods are generally low in fats. By choosing the suggested amounts of them, you are likely to increase carbohydrates and decrease fats in your diet, as health authorities suggest. You will also get more dietary fiber.

Complex carbohydrates, such as starches, are in breads, cereals, pasta, rice, dry beans and peas, and other vegetables, such as potatoes and corn. Dietary fiber—a part of plant foods—is in whole-grain breads and cereals, dry beans and peas, vegetables, and fruits. It is best to eat a variety of these fiber rich foods because they differ in the kinds of fiber they contain.

Eating foods with fiber is important for proper bowel function and can reduce symptoms of chronic constipation, diverticular disease, and hemorrhoids. Populations like ours with diets low in dietary fiber and complex carbohydrates and high in fat, especially saturated fat, tend to have more heart disease, obesity, and some cancers. Just how dietary fiber is involved is not yet clear.

Some of the benefit from a higher fiber diet may be from the food that provides the fiber, not from fiber alone. For this reason, it's best to get fiber from foods rather than from supplements. In addition, excessive use of fiber supplements is associated with greater risk for intestinal problems and lower absorption of some minerals.

**Advice for today:** Eat more vegetables, including dry beans and peas; fruits; and breads, cereals, pasta, and rice. Increase your fiber intake by eating more of a variety of foods that contain fiber naturally.

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**For A Diet With Plenty of Vegetables,  
Fruits, and Grain Products, Have Daily-**

**Three or more servings of various vegetables.**  
(Count as a serving: 1 cup of raw leafy greens,  
1/2 cup of other kinds)

- Have dark-green leafy and deep-yellow vegetables often.
- Eat dry beans and peas often. (Count 1/2 cup of cooked dry beans or peas as a serving of vegetables or as 1 ounce of the meat group.)
- Also eat starchy vegetables, such as potatoes and corn.

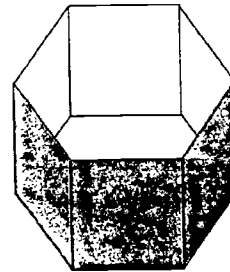
**Two or more servings of various fruits.**  
(Count as a serving: 1 medium apple, orange, or banana; 1/2 cup of small or diced fruit; 3/4 cup of juice)

- Have citrus fruits or juices, melons, or berries regularly.
- Choose fruits as desserts and fruit juices as beverages.

**Six or more servings of grain products  
(breads, cereals, pasta, and rice)**  
(Count as a serving: 1 slice of bread; 1/2 bun, bagel, or english muffin; 1 ounce of dry ready-to-eat cereal; 1/2 cup of cooked cereal, rice, or pasta)

- Eat products from a variety of grains, such as wheat, rice, oats, and corn.
- Have several servings of whole-grain breads and cereals daily.

Vegetables, fruits, and grain products are generally low in calories if fats and sugars are used sparingly in their preparation and at the table.



**Use Sugars Only in Moderation**

Americans eat sugars in many forms (see box on page 55). Sugars provide calories and most people like their taste. Some serve as natural preservatives, thickeners, and baking aids in foods. This guideline cautions about eating sugars in large amounts and about frequent snacks of foods containing sugars and starches.

Sugars and many foods that contain them in large amounts supply calories but are limited in nutrients. Thus, they should be used in moderation by most healthy people and sparingly by people with low calorie needs. For very active people with high calorie needs, sugars can be an additional source of calories.

Both sugars and starches—which break down into sugars—can contribute to tooth decay. Sugars and starches are in many foods that also supply nutrients—milk; fruits; some vegetables; and breads, cereals, and other foods with sugars and starches as ingredients. The more often

these foods—even small amounts—are eaten and the longer they are in the mouth before teeth are brushed, the greater the risk for tooth decay. Thus, eating such foods as frequent between-meal snacks may be more harmful to teeth than having them at meals.

Regular daily brushing with a fluoride toothpaste helps reduce tooth decay by getting fluoride to the teeth. Fluoridated water or other sources of fluoride that a doctor or dentist suggests are especially important for children whose unerupted teeth are forming and growing. Diets high in sugars have not been shown to cause diabetes. The most common type of diabetes occurs in overweight adults, and avoiding sugars alone will not correct overweight.

**Advice for today:** Use sugars in moderate amounts—sparingly if your calorie needs are low. Avoid excessive snacking and brush and floss your teeth regularly.

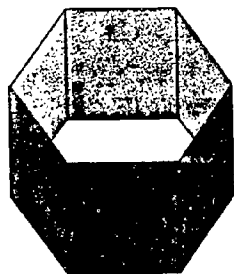
#### WHAT IS MEANT BY “SUGARS”?

table sugar (sucrose)	honey
brown sugar	syrup
raw sugar	corn sweetener
glucose (dextrose)	high-fructose
fructose	corn syrup
maltose	molasses
lactose	fruit juice
	concentrate

Read food labels. A food is likely to be high in sugars if its ingredient list shows one of the above first or second or if it shows several of them.

#### FOR HEALTHIER TEETH AND GUMS—

- Moderate the use of foods containing sugars and starches between meals.
- Brush and floss teeth regularly.
- Use a fluoride toothpaste.
- Ask your dentist or doctor about the need for supplemental fluoride, especially for children.
- Do not use a nursing bottle with any beverage other than water as a pacifier.



### **Use Salt and Sodium Only in Moderation**

Table salt contains sodium and chloride—both are essential in the diet. However, most Americans eat more salt and sodium than they need. Food and beverages containing salt provide most of the sodium in our diets, much of it added during processing and manufacturing.

In populations with diets low in salt, high blood pressure is less common than in populations with diets high in salt. Other factors that affect blood pressure are heredity, obesity, and excessive drinking of alcoholic beverages.

In the United States, about one in three adults has high blood pressure. If these people restrict their salt and sodium, usually their blood pressure will fall.

Some people who do not have high blood pressure may reduce their risk of getting it by eating a diet with less salt and other sources of sodium. At present there is no way to predict who might develop high blood pressure and who

will benefit from reducing dietary salt and sodium. However, it is wise for most people to eat less salt and sodium because they need much less than they eat and reduction will benefit those people whose blood pressure rises with salt intake.

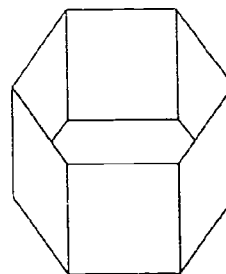
**Advice for today:** Have your blood pressure checked. If it is high, consult a doctor about diet and medication. If it is normal, help keep it that way: maintain a healthy weight, exercise regularly, and try to use less salt and sodium. (Normal blood pressure for adults: systolic less than 140 mmHg and diastolic less than 85 mmHg.)



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### TO MODERATE USE OF SALT AND SODIUM—

- Use salt sparingly, if at all, in cooking and at the table.
- When planning meals, consider that—
  - fresh and plain frozen vegetables prepared without salt are lower in sodium than canned ones.
  - cereals, pasta, and rice cooked with out salt are lower in sodium than ready-to-eat cereals.
  - milk and yogurt are lower in sodium than most cheeses.
  - fresh meat, poultry, and fish are lower in sodium than most canned and processed ones.
  - most frozen dinners and combination dishes, packaged mixes, canned soups, and salad dressings contain a considerable amount of sodium. So do condiments, such as soy and other sauces, pickles, olives, catsup, and mustard.
- Use salted snacks, such as chips, crackers, pretzels, and nuts, sparingly.
- Check labels for the amount of sodium in foods. Choose those lower in sodium most of the time.



### If you Drink Alcoholic Beverages, Do So in Moderation

Alcoholic beverages supply calories but little or no nutrients. Drinking them has no net health benefit, is linked with many health problems, is the cause of many accidents, and can lead to addiction. Their consumption is not recommended. If adults elect to drink alcoholic beverages, they should consume them in moderate amounts (see box on page 58).

Some people should not drink alcoholic beverages:

- **Women who are pregnant or trying to conceive.** Major birth defects have been attributed to heavy drinking by the mother while pregnant. Women who are pregnant or trying to conceive should not drink alcoholic beverages. However, there is no conclusive evidence that an occasional drink is harmful.
- **Individuals who plan to drive or engage in other activities that require attention or**

**skill.** Most people retain some alcohol in the blood 3 to 5 hours after even moderate drinking.

- **Individuals using medicines, even over-the-counter kinds.** Alcohol may affect the benefits or toxicity of medicines. Also, some medicines may increase blood alcohol levels or increase alcohol's adverse effect on the brain.
- **Individuals who cannot keep their drinking moderate.** This is a special concern for recovering alcoholics and people whose family members have alcohol problems.
- **Children and adolescents.** Use of alcoholic beverages by children and adolescents involves risks to health and other serious problems.

Heavy drinkers are often malnourished because of low food intake and poor absorption of nutrients by the body. Too much alcohol may cause cirrhosis of the liver, inflammation of the pancreas, damage to the brain and heart, and increased risk for many cancers.

Some studies have suggested that moderate drinking is linked to lower risk for heart attacks. However, drinking is also linked to higher risk for high blood pressure and hemorrhagic stroke.

**Advice for today:** If you drink alcoholic beverages, do so in moderation; and don't drive.

## **WHAT'S MODERATE DRINKING?**

**Women:** No more than 1 drink a day

**Men:** No more than 2 drinks a day

Count as a drink:

- 12 ounces of regular beer
- 5 ounces of wine
- 1½ ounces of distilled spirits (80 proof)

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**Some of the scientific basis for these guidelines:**

- The Surgeon General's Report on Nutrition and Health. 1988. Public Health Service, U.S. Department of Health and Human Services.
- Diet and Health: Implications for Reducing Chronic Disease Risk. 1989. National Research Council, National Academy of Sciences.
- Recommended Dietary Allowances, 10th Ed. 1989. National Research Council, National Academy of Sciences.

**Information on how to put the guidelines into practice:**

- Contact the Human Nutrition Information Service, USDA, Room 325-A, 6505 Belcrest Road, Hyattsville, MD 20782, for how to order:
  - The USDA Food Guide in "Preparing Foods and Planning Menus Using the Dietary Guidelines." HG-232-8, 1989.
  - "Dietary Guidelines and Your Diet." HG-232-1 through -11, 1986 and 1989. Bulletins on eating right the Dietary Guidelines way.
  - "Nutritive Value of Foods," HG-72. 1985.
- Contact the National Institutes of Health, Room 10 A 24, Building 31, Bethesda, MD 20892, for this and other bulletins:
  - "Eating for Life." NIH Publication No. 88-3000, 1988.

- Contact your county extension home economist (Cooperative Extension System) or a nutrition professional in your local Public Health Department, hospital, American Red Cross, dietetic association, diabetes association, heart association, or cancer society.

**Acknowledgments:** The U.S. Department of Agriculture and the U.S. Department of Health and Human Services acknowledge the recommendations of the Dietary Guidelines Advisory Committee—the basis for this edition. The Committee consisted of Malden C. Nesheim, Ph.D. (chairman); Lewis A. Barnes, M.D.; Peggy R. Borum, Ph.D.; C. Wayne Callaway, M.D.; John C. LaRosa, M.D.; Charles S. Lieber, M.D.; John A. Milner, Ph.D.; Rebecca M. Mullis, Ph.D., and Barbara O. Schneeman, Ph.D.

## Appendix VI

## Sources for More Information

State Nutrition Education and Training (NET)  
Program Coordinator  
State Department of Education

U.S. Department of Agriculture (USDA)  
Food and Nutrition Service (FNS)  
3101 Park Center Drive  
Alexandria, VA 22302  
Contact USDA-FNS Regional Offices for Assistance

### **USDA Food and Nutrition Service Regional Offices**

Mid-Atlantic Regional Office  
Mercer Corporate Park  
CN 02150  
Trenton, NJ 08650  
(609) 259-5091  
*Delaware, District of Columbia, Maryland, New  
Jersey, Pennsylvania, Puerto Rico, Virginia, West  
Virginia*

Northeast Regional Office  
10 Causeway Street  
Boston, MA 02222  
(617) 565-6418  
*Connecticut, Maine, Massachusetts, New Hamp-  
shire, New York, Rhode Island, Vermont*

Midwest Regional Office  
77 West Jackson  
Chicago, IL 60601  
(312) 353-1044  
*Illinois, Indiana, Michigan, Minnesota, Ohio,  
Wisconsin*

Southeast Regional Office  
77 Forsyth Street SW, Suite 112  
Atlanta, GA 30303  
(404) 730-2588  
*Alabama, Florida, Georgia, Kentucky, Mississippi,  
North Carolina, South Carolina, Tennessee*

Mountain Plains Regional Office  
1244 Speer Blvd., Suite 903  
Denver, CO 80204  
(303) 844-0312  
*Colorado, Iowa, Kansas, Missouri, Montana,  
Nebraska, North Dakota, Utah, Wyoming*

Southwest Regional Office  
1100 Commerce Street, Room 5-C-30  
Dallas, TX 75242  
(214) 767-0256  
*Arkansas, Louisiana, New Mexico, Oklahoma,  
Texas*

Western Regional Office  
550 Kearney Street, Room 400  
San Francisco, CA 94108  
(415) 705-1311  
*Alaska, Arizona, California, Guam, Hawaii, Idaho,  
Nevada, Oregon, Washington*

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- Office of Disease Prevention and Health Promotion  
National Health Information Center (ONHIC)  
P.O. Box 1133  
Washington, DC 20013-1133  
(800) 336-4797
  - Food and Nutrition Information Center (FNIC)  
National Agricultural Library  
Room 304  
Beltsville, MD 20705  
(301) 344-3719
  - American School Food Service Association (ASFSA)  
1600 Duke Street, 7th Floor  
Alexandria, VA 22314  
(703) 739-3900 or (800) 877-8822
  - National Food Service Management Institute  
P.O. Box 188  
University, MS 38677  
(601) 232-7658 or (800) 321-3054
  - Human Nutrition Information Service  
6505 Belcrest Road, Room 325-A  
Hyattsville, MD 20782  
(301) 436-8617
  - American School Health Association  
P.O. Box 708  
7263 State, Route 43  
Kent, OH 44240-0708  
(216) 678-1601
  - The National Parents and Teachers Association  
1201 16th Street, N.W.  
Washington, DC 20036  
(202) 822-7878
  - National Heart, Lung, and Blood Institute Information  
Center  
4733 Bethesda Avenue, Suite 530  
Bethesda, MD 20814-4820  
(301) 951-3260

**Notes**

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NUTRITION AND TECHNICAL SERVICES DIVISION  
FOOD AND NUTRITION SERVICE  
U.S. DEPARTMENT OF AGRICULTURE  
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### WE WANT TO HEAR FROM YOU

We hope you have found the *Nutrition Guidance for the Child Nutrition Programs* useful in learning about the *Dietary Guidelines for Americans* and how you might begin to implement the Guidelines in the meals you serve. Please take a few minutes to answer the following questions. Your cooperation is voluntary; however, your answers will help us develop menu planning guides and other materials for use in the future. Once you have completed the questionnaire, please fold it, seal it with tape, and mail. You need no postage if you mail this in the United States. Thank you for your help.

\_\_\_\_\_  
Name (optional)

\_\_\_\_\_  
Title

Do you work for a Child Nutrition Program ? \_\_\_\_yes \_\_\_\_no  
If yes, which program?

- \_\_\_\_ National School Lunch Program  
\_\_\_\_ School Breakfast Program  
\_\_\_\_ Child Food Care Program  
\_\_\_\_ Child Care Center  
\_\_\_\_ Family Day Care  
\_\_\_\_ Adult Care Food Program  
\_\_\_\_ Summer Food Service Program

\_\_\_\_\_  
Which State do you work in?

Please comment on the content of this guidance

	useful	not useful	Comments—Please be specific
<b>Nutrition Guidance:</b> Implementation of Each Guideline			
<b>Menu Make-Overs</b>			
<b>Appendix:</b>			
Nutrition Quizzes			
Dietary Fat Chart			
Advice on Feeding Children in Child-Care			
Dietary Guidelines for Americans			
Glossary			
<b>Overall Publication</b>			